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May, 1954

# PACIFIC FISHERMAN

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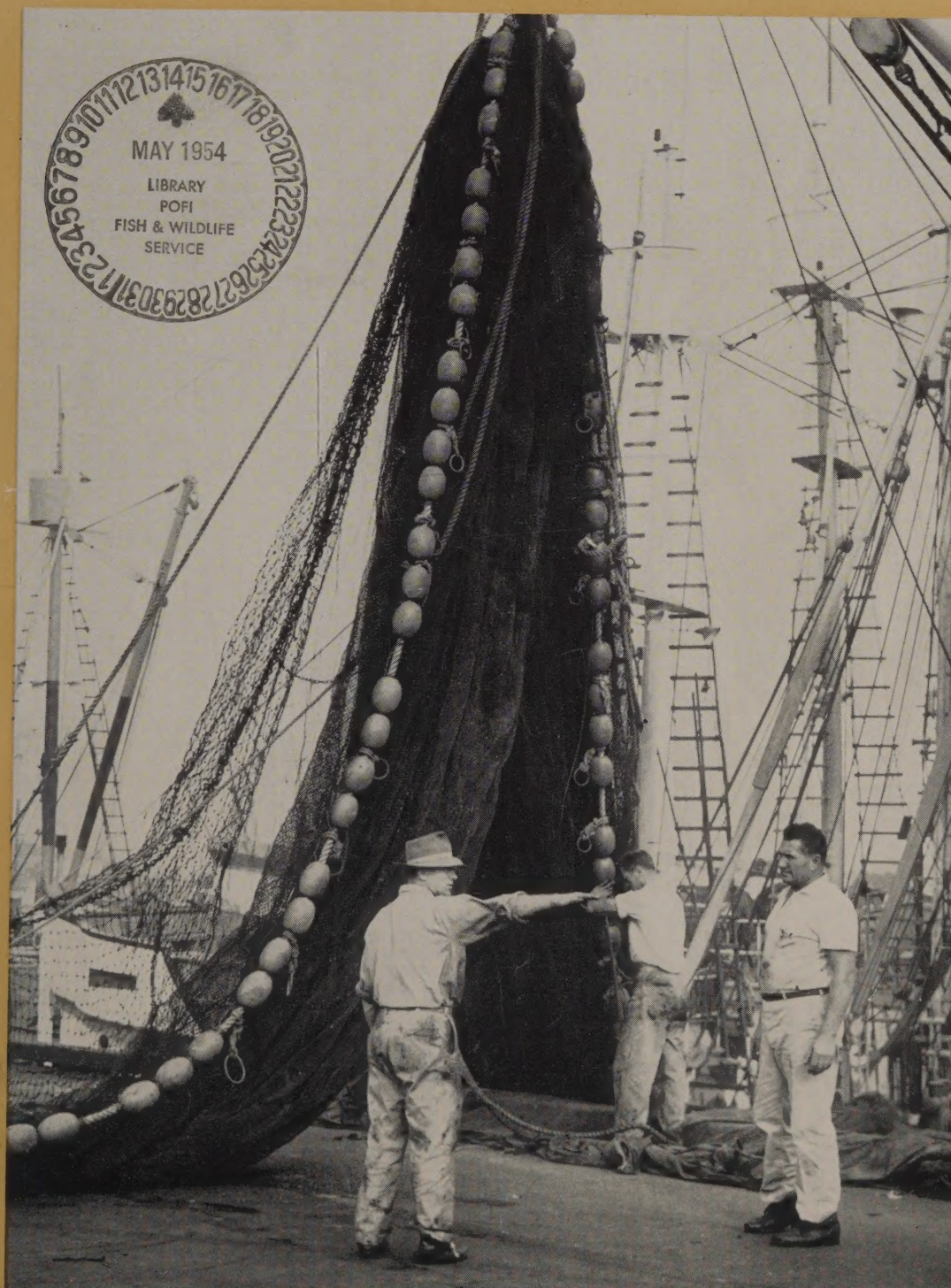
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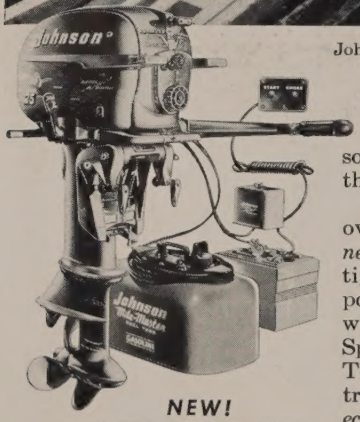
# Talk about Performance!

Johnson enthusiasts, Charles Caverly and Raymond Jovin of Warren, Rhode Island.




**NEW!**
**ELECTRIC STARTING**
**SEA-HORSE 25**
**25 HP**

It was a great day for commercial fishermen — when the famous Johnson Sea-Horses 10 and 25 appeared on the outboarding scene.

They are *powerful* and *fast* — speeds over 30 mph with the 25! They are *maneuverable* — shallow, obstructed waters, tight places, don't stop a Sea-Horse powered boat. They are *easy to operate* — with full Gear Shift and Twist-Grip Speed Control right at your finger tips. They are *portable* — easy to install, to transfer from boat to boat. They are *economical* — to buy, maintain and service. They are *space-saving* — no valuable cargo space taken up by these motors. They give you *long cruising range* — with the 6-gallon Mile-Master Fuel System. (For greater range, there is the special Johnson Fuel-Master System that automatically pumps fuel from your own built-in tanks). And they are DEPENDable; Sea-Horses are known for this feature the world around!

See your Johnson Dealer. Look for his name under "Outboard Motors" in your classified phone book.

***FREE!*** Send for the big new catalog which describes the 1954 Sea-Horses in detail. Write:

**JOHNSON MOTORS**
**6700 PERSHING ROAD, WAUKEGAN, ILLINOIS**
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**5 GREAT SEA-HORSES FOR 1954**

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| **ELECTRIC STARTING SEA-HORSE 25**—25 hp. Push-button starting | **$498.00*** |
| **SEA-HORSE 25**—25 hp. Ready-Pull starting | **$410.00*** |
| **SEA-HORSE 10**—10 hp. | **$297.50*** |
| **SEA-HORSE 5½**—5½ hp. | **$210.00*** |
| **SEA-HORSE 3**—3 hp. | **$145.00** |
| **SHIP-MASTER REMOTE CONTROL**—Fits Sea-Horse 5½, 10, and both 25's. Instant hook-up. From | **$29.50** |

*OBC certified brake hp at 4000 rpm. Prices f.o.b. factory, subject to change. *Includes Mile-Master Fuel System.*

**Johnson**
**SEA-HORSE**
**OUTBOARD MOTORS**

# PACIFIC FISHERMAN

May, 1954 Volume 52, No. 6


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## Star-Kist Foods to Develop Canning Operations in Chile

Star-Kist Foods, Inc., this spring acquired controlling interest in a fish cannery in Chile, according to announcement by Nick Trutanic, production manager of the Star-Kist upon his return from South America.

The cannery, equipped to can bonito and tuna, is the Pesquera Iquique of Iquique, Chile. To supply this cannery, Star-Kist Foods Inc. will use the services of the local fishing fleet, developing the techniques of fishing and gear, and seeking to improve and extend the Chilean fishing industry.

The cannery has as a major part of its facility a cold storage and freezing unit. The storage has a capacity of 1,500 tons and the freezer can take in excess of 100 tons per day. The dock facilities will permit unloading fishing vessels of any size.

Star-Kist has also secured operational interest in a canning plant in Concepcion, Chile, an affiliate of the Iquique plant. This cannery is equipped to pack miscellaneous fish, other than bonito and tuna.

Further, reports Mr. Trutanic, Star-Kist has entered into an agreement with two freezing companies, one in Valparaiso and the other in Contero. The purpose of this arrangement is to provide an opportunity to develop the local Albacore fishery which, according to the recent fishery exploration by Star-Kist's research vessel in Chilean waters, seems commercially profitable.

Modernizing of these freezers will be completed in time for the next Chilean Albacore season, which runs from December through April.

The freezer and cold storage facilities at Iquique will be available, to some extent, to Star-Kist's fleet of purse seiners and clippers fishing the high seas of South America, but the primary aim of the new Star-Kist venture will be to develop the native tuna fishery to a point where it will benefit the Chilean people and, at the same time, increase the supply of tuna for consumption.

## Norway's Cod Fisheries Have Ups and Downs Also

The spring cod fisheries of Norway's Lofoten Islands are among the oldest and best-sustained fisheries of all the world. They have yielded heavy catches through the centuries, averaging 70,000 to 80,000 tons of cod per season.

But, old as they are, and rich as they are, the Lofoten fisheries are subject to unexplained variations, such as those which today write failure for the California sardine, and set new lows in Alaska salmon.

The Lofoten cod fishery hit its all-time low in 1953 with 51,000 tons; only to drop this season to around 45,000 tons.

There is a tide in fisheries as well as in the sea.

## Farley and Suomela on Commissions

John L. Farley, director of the United States Fish and Wildlife Service, was appointed a member of the Inter-American Tropical Tuna Commission April 13; and the same day Arnie J. Suomela, assistant director, was appointed by the President as a member of the International Commission for Northwest Atlantic Fisheries.

Mr. Farley succeeds Dr. John L. Kask, who was Mr. Suomela's predecessor as assistant director. On the Sockeye commission, Mr. Suomela succeeds A. M. Day, former FAWS director; and Dr. Kask on the Northwest Atlantic commission.

One of a series of favorite American meals brought to you by the American Can Company

*North, South, or East—you'll love this*

# WEST COAST SEA FOOD SUPPER

**A breeze to prepare—with today's most-delicious-ever canned foods!**

**The American Can Company** not only makes today's finest food containers . . . it also helps canners develop ever-better ways to capture *on-the-spot* flavor, seal in even more vitamins than you often get in "fresh-bought" varieties.

YOU DON'T have to travel to the West Coast to try this favorite local meal. A quick trip to the corner grocery—and you can get the makings to fix it right at home!

Fresh-from-the-Pacific fish, succulent crab, sun-grown fruits, even almonds—you'll find *all* the major ingredients in Canco cans made by the American Can Company, the company that *perfected* the modern food container.

In minutes, you can turn them into a meal that *looks* as pretty as this picture . . . *tastes* so good it's almost sure to become one of *your* family favorites.

Try the easy (and inexpensive) recipes. See what clever things you can do with today's superb canned foods!

## WEST COAST SEA FOOD SUPREME

**1 can condensed chicken consommé or**
**1 can clam juice**
**¼ cup flour**
**2 to 3 teaspoons curry powder, if desired**
**½ teaspoon salt**
**½ cup drained canned pineapple chunks**
**½ cup seedless raisins**
**1 can (7 oz.) tuna or**
**1 can (7¾ oz.) salmon**
**1 can (6½ oz.) crab meat**
**1 can (3 oz.) chow mein noodles, heated**
**Canned shredded coconut**

In medium-sized saucepan, combine consommé or clam juice with water to make 2 cups. Blend flour, curry powder and salt with ½ cup water to make smooth paste; add to consommé. Cook, stirring constantly, until thickened. Add pineapple and raisins; simmer 5 minutes, stirring frequently. Drain and flake tuna or salmon and crab meat, removing any hard fiber. Fold sea food into sauce; heat thoroughly. Serve over chow mein noodles. Garnish with coconut.

## GREEN BEANS AMANDINE

Heat and season 1 can (1 lb.) green beans with butter or margarine, salt and pepper. Just before serving, toss with ¼ cup canned chopped toasted almonds.

## TOMATO ASPIC AND ASPARAGUS SALAD

Chill 1 can tomato aspic and 1 can (1 lb. 4 oz.) asparagus spears. Arrange on crisp greens; serve with French dressing.

## SUNSHINE FRUIT MEDLEY

**1 can (1 lb.) fruit cocktail**
**2 tablespoons cornstarch**
**1 can (12 oz.) apricot nectar**

Drain syrup from fruit cocktail; reserve fruit. Blend syrup with cornstarch in small saucepan; add apricot nectar. Cook, stirring constantly, until sauce is thickened and clear. Fold in reserved fruit; cover and chill. Serve spooned over cake wedges.

**These recipes serve 4.** You may use can weights that vary slightly from those given here. Recipes were developed in the Test Kitchens of the American Can Company.

**Important Note:** Whenever you do not use a full can of food · · cover and keep the remainder in the refrigerator *right in the can*. It's safe—and it's sensible!

**Send for new cookbook—**
**"Quick Trick Cookery"!**

48 pages of menus, recipes, illustrated in color. Mail 15¢ to American Company Test Kitchens, Box 259, New York 46, N.Y., or in Canada, Box 130, Hamilton, Ont.

# American Can Company

*Containers to help people live better*

(CANCO) Registered Trademark of the American Can Company N.Y., N.Y.

# An ad for YOU in the May 17th LIFE!

**More than 26,000,000 readers** of LIFE Magazine will see the ad at the left in beautiful full color.

It's the second in the Canco series of great new consumer advertisements promoting the prestige and broadening the use of all canned foods and beverages.

This ad, like the ones to follow, presents today's busy homemakers with clear, easy-to-follow recipes calling for a *wide* variety of canned foods. This Canco program dramatizes to meal planners the wonderful variety of nutritious, delicious foods available today in cans.

This is another example of how Canco stimulates *your* sales . . . helps you sell more in '54.

**Three fish products are featured** in the advertisement at the left, and others will appear in future ads.

Take full advantage of this campaign by carrying to your buyers this story of greater potential consumer markets.

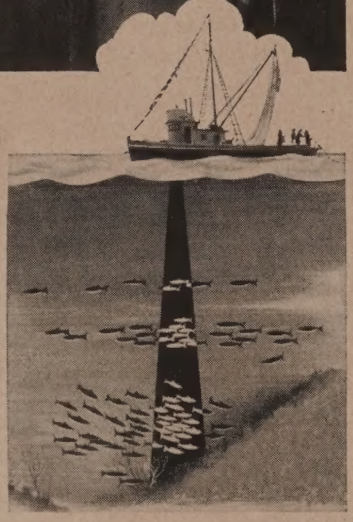
*Go first to the people who are first!* **AMERICAN CAN COMPANY**

CANCO

New York, Chicago, San Francisco; Hamilton, Canada

*Canco offers* you the finest full line of cans for fish and fish products available anywhere. *Whatever* your need, *wherever* your need, Canco has the *right* package.

# New ELECTRONIC "FISH-FINDER"



## Eliminates Guesswork —Assures Bigger Catches

**FISCHLUPE*** is the newest cathode-ray type of depth sounder that gives a continuous picture of the waters beneath your ship.

It locates schools of fish . . . spots underwater hazards that can hang nets . . . aids in navigation and survey work . . . functions as an underwater depth indicator. Fish and other objects appear as short horizontal traces on a cathode ray tube.

The FISCHLUPE is a boon to fishermen. Length of "fishing time" can be reduced. Unprofitable towing can be prevented. The catch can readily be estimated, and net hauled in at the correct time. No special knowledge required to operate the equipment.

*"Fish-Lens"

***WRITE FOR COMPLETE DETAILS—TODAY***

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1008 Western Avenue, Seattle 4, Wash. Tel: Seneca 8178
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***RADIOMARINE CORPORATION of AMERICA***

*A SERVICE OF RADIO CORPORATION OF AMERICA*

75 VARICK STREET, NEW YORK 13, N. Y.

# HAUL MORE HAULS WITH THIS NEW FISHING ROPE...

## ROEBLING PREFORMED

# SPECIAL GALVANIZED

YOU GOTTA SAVE MONEY with this new fishing rope. Roebling's given it the whole works:

**Special galvanizing** by an improved method that gives *every* wire in the rope extra resistance to corrosion:

**Preforming** for handling ease, smooth drum winding, top resistance to bending. This is the original preformed fishing rope.

**Core protection** by impregnating each fibre core with a preservative that resists excessive absorption . . . reduces destructive action of salt water, fungi, mildew and dry rot.

Next time you order fishing rope, order Roebling's New Preformed Special Galvanized. And for standing rigging or any other service there's a Roebling wire rope designed for top dependability and long-run economy. Call your distributor or the nearest Roebling office. Look in the yellow pages. John A. Roebling's Sons Corporation, Trenton 2, N. J.

**ROEBLING** AR ROEBLING CF&I

*Subsidiary of The Colorado Fuel and Iron Corporation*

# Pauls Netting holds up longer under peak loads!

**Pauls netting is sold wherever professional fishermen are found**

*Pacific Coast Distributors*
C. J. Hendry Company
San Pedro, California
San Diego, California
San Francisco, California

*The Beebe*
Portland, Oregon
Astoria, Oregon

*Sund and D'evers Co.*
Seattle, Washington
Kelchikan, Alaska

For years Pauls' cotton and linen netting has earned an unbeatable reputation. That's because each fibre, in each strand of thread is selected for *absolute uniformity* of *length and strength.*

It means that your *unusually heavy loads* are handled *equally well* by each fibre in each mesh. No unfair loading on strong meshes while the weak strands rip and fray.

*In Pauls Netting every strand has strength.* With Pauls' profit-making netting, you welcome peak loads, in all kinds of weather. And you expect absolute minimum repair.

So make your next netting . . . Pauls Netting!

PAULS *Netting*

**Pauls Fish Net Division**
THE LINEN THREAD COMPANY
357 West Ohio Street, Chicago, Illinois

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# OBTAIN MAXIMUM RECOVERY OF HIGH PROTEIN FISH MEAL

**The De Laval-Bird Meal Recovery Centrifuge is designed to produce maximum yield of high protein meal. It separates the meal from press liquor so efficiently that it will do the work of 3 or 4 smaller machines. Moreover, this sturdy horizontal type centrifuge saves space, reduces first-cost expense and minimizes maintenance.**

**De Laval-Bird Meal Recovery Centrifuges are available in sizes capable of handling 3,000 . . . 6,000 . . . and up to 10,000 gallons per hour of press liquor.**

**THE DE LAVAL SEPARATOR COMPANY**
Chicago POUGHKEEPSIE, N.Y. San Francisco

**DE LAVAL** *FISH OIL SEPARATORS*

# *Look for the Anchor on the Head*

**. . . to be sure it's an Anchorfast Nail of Monel!**

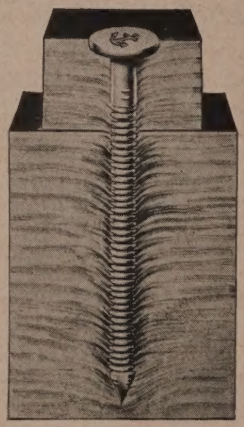
Do you want a perfect fastening for your wooden boat — one that drives like a nail but holds like a screw — one that has the strength and toughness of structural steel, yet is rust-resisting and corrosion-resisting — one that incessant vibrations and pounding seas can't back out?

You get all these advantages when you order Anchorfast® nails of Monel®!

**You can be sure they're Monel when you see the anchor stamped on the head.**

Here's where you can order any quantity you want—and remember they're economical to buy and install — order them for your next boat or fastening job.

**THE INTERNATIONAL NICKEL COMPANY, INC.**
67 Wall Street New York 5, N. Y.



Notice those annular grooves on the Monel Anchorfast nail—they're what give it such tremendous holding power.

INCO TRADE MARK **Inco Nickel Alloys**

**Monel**...*"It's the SEAGOIN® metal"*

**Where to Buy Anchorfast Nails**

**J. M. TULL METAL & SUPPLY CO.**
285 Marietta Street
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**METAL GOODS CORPORATION**
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Dallas 9, Texas

711 Milby Street
Houston 3, Texas

432 Julia Street
New Orleans 12, Louisiana

**PACIFIC METALS COMPANY, LTD**
1400 South Alameda Street
Los Angeles 21, California

1533 India Street
San Diego 1, California

3100 Nineteenth Street
San Francisco 10, California

**EAGLE METALS COMPANY**
2336 North Randolph Avenue
Portland 12, Oregon

4755 First Avenue South
Seattle 4, Washington

**WILKINSON COMPANY, LTD.**
190 West Second Avenue
Vancouver, British Columbia

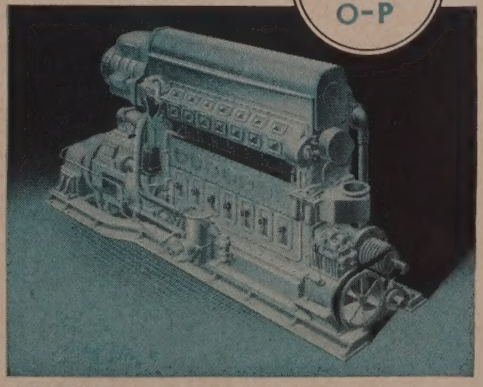
"It's all over my head. All I know is that this same boat has gone over here for years—but never at that speed nor with that kind of load . . . and all because of something called Re-Powered with O-P."

You may have missed this particular conversation in your waters, but chances are that you'll hear . . . "Re-Powered with O-P" many times along the waterfront in months to come.

This new marine Opposed-Piston engine was designed especially for putting more power . . . more performance in your engine space. All accessories . . . lube oil cooler, filters, pumps, heat exchanger and attendant piping are engine mounted. You need only run in raw water lines and fuel line to your power hold space—and you have a complete, compact power package.

Add reliability of Opposed-Piston design *proved* by more than 5 million installed horsepower in all industry, and you'll agree that your next move is to your telephone to call your nearby Fairbanks-Morse Marine Specialist. Or write Fairbanks, Morse & Co., Chicago 5, Illinois.

REPOWER WITH O-P



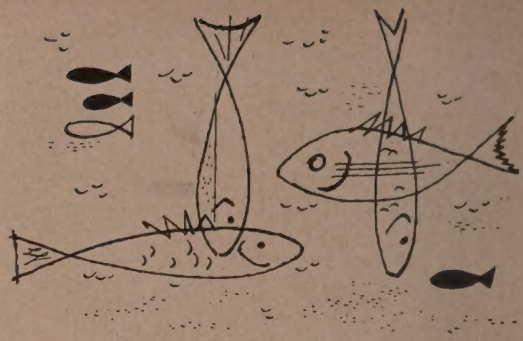
Model 38F Marine O-P Diesel for the 225 to 750 horsepower class.

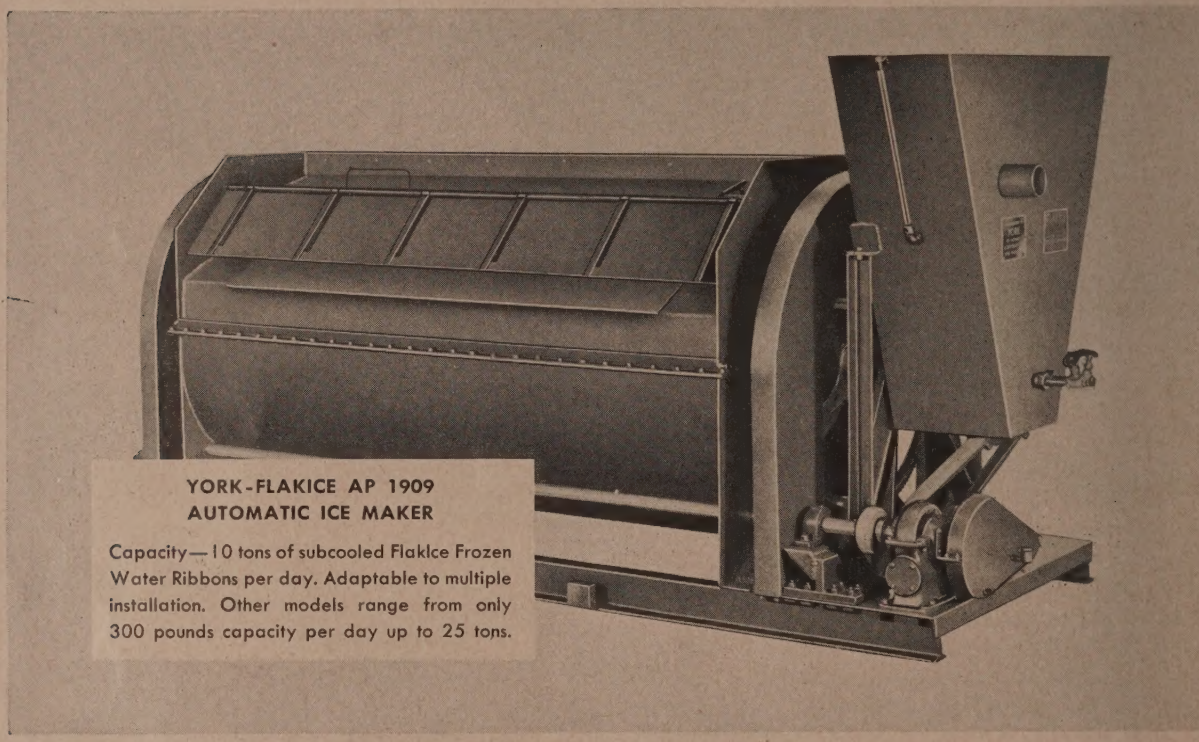
**FAIRBANKS-MORSE**

*a name worth remembering when you want the best*

DIESEL AND DUAL FUEL ENGINES • DIESEL LOCOMOTIVES • RAIL CARS • ELECTRICAL MACHINERY
PUMPS • SCALES • HOME WATER SERVICE EQUIPMENT • FARM MACHINERY • MAGNETOS

*If you are about to invest in plant equipment, remember...*





YORK-FLAKICE AP 1909
AUTOMATIC ICE MAKER

Capacity—10 tons of subcooled Flakice Frozen Water Ribbons per day. Adaptable to multiple installation. Other models range from only 300 pounds capacity per day up to 25 tons.

## A YORK-FLAKICE AUTOMATIC ICE MAKER WILL GIVE YOU BETTER ICE . . . AT LOWER COST!

***By better ice*** we mean cleaner ice . . . with less shrinkage waste . . . made on your own premises . . . where and *when* you want it.

***By lower cost*** we mean *substantially* lower. Costs of making this ice vary a few pennies per hundred pounds from community to community because of power and water rates. Your York Representative will compute *your* costs (which will probably surprise you). He can show you, too, how York ends hauling, handling and crushing. Call him today. Or write York Corporation, York, Pa.

automatic ice makers by york

YORK CORPORATION York YORK, PA.

HEADQUARTERS FOR MECHANICAL COOLING SINCE 1885

# "MOST ECONOMICAL ENGINES THAT CAN BE HAD"

—CARL McCULLAH, *President*
McCullah Bros., Inc., Oceanside, California

To run a profitable sport fishing business you need good boats, good skippers and, above all, good engines. Customers want to get out where the fish are, without wasting time, and they want to get home that night.

McCullah Bros., Inc., operate three fishing boats out of Oceanside, and they have been Caterpillar-powered from the start. In the words of Carl McCullah, "We run boats out of here every day, and with Cat* Engines we don't have to worry about their coming back."

The newest boat in the fleet, the *Del Mar*, is a trim 65-footer with 16½-foot beam and 3½-foot draft. Because of the exceptional performance records set by Caterpillar Diesels in their two older boats, the owners installed a Cat D337 Marine Engine in the *Del Mar*. Turning a 40″ x 38″ propeller, the engine delivers 170 continuous horsepower and gives the boat a speed of 15 knots.

McCullah Bros. have found the simple maintenance and rugged dependability of these engines more than pay for their cost. If you're building a new boat or repowering an old one, talk to your Caterpillar Dealer first. He offers 12 engine sizes, up to 400 HP for continuous non-stop service. And, he backs their long, profitable work life with reliable dockside service. Call him today!

Caterpillar Tractor Co., San Leandro, Cal.; Peoria, Ill., U.S.A.

**CATERPILLAR***

*Both Cat and Caterpillar are registered trademarks—®

**SPECIFY CAT POWER FOR HIGH-PROFIT PERFORMANCE**

# GOOD FISHING
## REQUIRES
# GOOD GEAR

## PLYMOUTH MANILA ROPE

Plymouth Bolt Rope, and Plymouth Bolt Purse Line are made especially for seiners. Highest Quality Manila Rope for Particular Fishermen. The choice of Highliners for years.

**Plymouth Manila Lasts Longer, Wears Better and Saves You Money**

## BARBOUR'S NETTING

BARBOUR'S
THE LINEN THREAD CO., INC.

New Braided Double-knot Nylon, Regular Double-knot Nylon, and Linen Double-knot — all three have been proved by Pacific Coast salmon fishermen from Puget Sound to Bristol Bay.

**For Bigger Catches and More Economy Buy BARBOUR'S Netting**

GOOD GEAR makes fishing easier with less lost time for repairing parted lines or torn web. Keep your gear in top notch condition and be certain that in the long run it will save you money.

**KEEPING AHEAD of the constantly changing requirements for vessel equipment, fishing gear and cannery supplies is a habit of 57 years standing with us!**

# PACIFIC MARINE SUPPLY CO.

*Serving the Northwest and Alaska since 1897*

**1217-1223 WESTERN AVE., SEATTLE 1, WASH. MUTUAL 4848**

PACIFIC FISHERMAN MAY 1954

# Salmon Pricing Under Trade Decree Obscure

DEVELOPMENT of preparations for the 1954 Alaska salmon season moved at slow-bell as this issue went to press, with all primary parties anxiously concerned with application of the Federal Trade Commission's "consent decree," which forbids setting prices by agreement between groups.

The **decree** follows the pattern of the **settlement** signed in January — as it was expected to do — and specifically forbids **"entering into . . . any planned and concerted course of action or agreement authorizing or empowering any association, group, corporation or union to negotiate, bargain, or agree as to prices to be paid or received in the purchase or sale of salmon."**

There are two broad exceptions to the prohibition. One exempts Bristol Bay operations, where the consent settlement conceded the fishermen's union members have employe status.

The second exception has to do with bona fide cooperatives, which have preferential status.

### *A. F. of L. Unions Move Toward Cooperative Plan*

Although none of the union organizations moved definitely prior to release of the formal decree, the A. F. of L. affiliates in March and April took legal action looking toward the formation of cooperative marketing groups which would be in position to adopt prices at which their members' fish would be sold, and to contract for such sale.

The legal steps had been taken, but at presstime it did not appear that the signing-up of cooperative members had proceeded to the point where consummation of these arrangements could be expected soon.

The independent groups, such as the Alaska Fishermen's Union, and the unions affiliated with the I. L. W. U. were keeping their cards close to their vests, but implying that they could cope with the situation by special means when it had to be handled.

### *Significant Agreement Is Signed Early*

Good progress with respect to agreements other than those concerning fish prices was made early in the spring. Late March saw signature and ratification of an agreement between the Alaska Fishermen's Union and the Alaska Salmon Industry, Inc., applying wherever the AFU is active, save on Bristol Bay; and with supplementary agreements covering its members in the Westward and Kodiak districts.

Broadly, the agreement was identical with that of 1954 except insofar as it provided for raising the health-and-welfare payments from $45 to $64.46; and provided for changes in procedure to permit consolidation of some cannery operations.

Beside its direct application, the agreement was considered a long stride forward in that it could be expected to exert some influence on other agreements required before the season opened.

A principal cause for concern with respect to cannery operation contracts was that with the machinists, where there appeared to be little progress, and the viewpoints were far from focus.

The I. L. W. U. cannery workers local 37 was asking a 10% increase in wages, a $42.50 increase in stand-by pay and a $30.60 increase in cash payment in lieu of health and welfare protection.

### *Japanese Operations Give Concern to Fishermen*

Fishermen's organizations were aroused over reports that the Japanese high seas fishing fleet will be doubled in size again this year. George Johansen, secretary-treasurer of the Alaska Fishermen's Union, expresses the opinion that the fishing potential of the Japanese fleet this season will be such as to make a catch of 10,000,000 salmon possible. He points, in contrast, to the fact that the American in-shore salmon fishery has fallen to a level which forced the Fish and Wildlife Service to impose a 50% reduction in American fishing effort.

Faced with the unhappy prospect that only a good run could materially reduce per case costs—and that no good run was to be expected — the operators have been striving to arrange consolidations which will permit utilization of the run at a cost level offering some possibility of avoiding the crushing losses of recent seasons.

# First Quarter Tuna Delivery Rises 47%

The California tuna industry was considerably ahead of the first three months of 1953, with over 36,000 tons delivered from all sources against a total of 24,560 tons in 1953, an increase of about 47 per cent. Imports of frozen tuna, mainly from Japan and Peru, were up to 6,181 tons from 5,562 in the first quarter of 1953.

Thus the domestic fishery was ahead 30,502 tons against 19,000 tons for the initial three months of last year. However, it must be remembered that the tuna fishery below

**This is Palmyra Island, 1,000 miles south and a little west of Honolulu, where Chris Dahl and Dean Kayler, partners in the Kayler-Dahl Fish Co., Seattle and Petersburg, Alaska, have taken a 75-year lease on the island and are preparing to develop it as a base of operations for long-line tuna fishing. They have three halibut vessels fishing in the vicinity of Palmyra at the present time. The photo — taken by Donald Bates — shows the POFI research vessel "John R. Manning" taking fresh water at one of the facilities built on Palmyra by the Navy.**

the international border to Peru was practically a failure during the first half of the year, whereas good fishing has prevailed since last November and into 1954.

Pack-wise the totals for January-March showed the 1954 industry around 500,000 cases ahead of last year, the latter showing 1,068,174 cases compared to 1,700,000 this year.

Southern California's purse seine fleet wasn't enjoying very good luck, particularly for the "local" Mexican banks, said to be "bare" of tuna. Some of the seiners had transferred to banks below the equator, and this included many of the smaller vessels, normally operating only off Mexico.

Looking ahead to June, it appeared likely that, for the first half of 1954, the California industry, with an assist from its frozen imports, might reach 4,250,000 cases against 1953's 3,133,888 cases for the same period in 1953. Observers along the Southern California waterfronts estimated the domestic fleets could contribute considerably more tonnage because the normal late spring run at tropical banks is around 30 days early this year.

## Herring Reduction Nixed; Shrimp Trawling Extended

The California Fish and Game Commission in late February denied eight applications for permits to reduce herring.

Renewal was made of commercial shrimp trawling regulations for another year, but a requested extension of the trawling area into southern California waters was postponed for further study.

A permit was granted to reduce 100 tons of sea lions for animal food. Hunting is restricted to an area around the Santa Barbara islands. No harbor seals or elephant seals may be taken.

# Line Is. Long-Liners Find Better Fishing

Better-than-before long-line tuna fishing in the Line Islands was reported by the Jangaard vessels early on the second trip of their operations under an arrangement with the Pacific Oceanic Fishery Investigations.

**Alrita** and **North American,** commanded by Capts. Lars and Sverre Jangaard, respectively, reported that they were taking from three to five tons of fish as they pursued their fishing in the vicinity of Christmas Island. It is believed that their average productivity would be greater if they could confine their activity to the more productive areas; but that under their arrangement with POFI they are required to work on a partially exploratory basis with productivity not a point of prime consideration.

On their first trip the vessels, each with a 7-man crew, fished a combined total of 59 boat-days, running an average of 56 baskets of gear per day. The gear used was 270 fathoms and 15 hooks per basket. Most of the fishing was done within 30 miles of Christmas Island.

Average catch per boat-day, excluding sharks, was 1.9 tons, of which 1.8 tons was Yellowfin and the balance Albacore, Bigeye and Skipjack. A few marlin and many sharks were taken.

**North American's** delivery was 116,200 lbs. and the **Alrita** 89,910 lbs. In addition, they had a combined catch of five tons of marlin, bigeye, wahoo and other species sold in the local market at Honolulu.

The Yellowfin average 82 lbs. per fish, but fell into two distinct size groups, of which one, comprising 41% of the total tuna catch, averaged 55 lbs., while the other averaged 135 lbs.

Cannery rejections were expected to run somewhat over 4%.

Palmyra Island operations of the Kayler-Dahl interests were delayed in getting started by a variety of mechanical problems associated with the auxiliary power requirements for the refrigeration of vessels operating in tropical waters.

Chris Dahl, one of the partners in this venture, returned to Seattle in April after spending some time at Palmyra and reported that the vessels would soon be in operation. He expected to go back to the area again before the start of operations in the Alaska phase of the Kayler-Dahl activities.

George Henderson of the firm which installed the absorption refrigeration systems aboard the **North Star** and **Washington Star** freezerships serving the Van Camp Sea Food Co. operations at Samoa returned to his headquarters in midspring from a trip to that point as a consultant on problems associated with the proper refrigeration operations and procedure for freezing tuna of the size being taken in that vicinity.

The two freezerships were originally equipped for freezing Bristol Bay Red salmon, with an average weight of about 6 lbs., and it is obvious that some material changes were required in refrigeration operation and practice to handle out-sized tuna effectively.

# Saltonstall Bill Faces Grueling Fight Despite Fish Industry's Support

UNANIMITY of a kind rare in the fish business marked the industry position on the Saltonstall Bill before Senator James Duff's sub-committee in Washington in April.

The bill directs that funds derived from the import duties on fishery products be made available to the Secretary of the Interior for use in market development and scientific research designed to provide a solution for the fishing industry's economic and biological problems. These funds now pass into the hands of the Secretary of Agriculture, and some small part of them are doled out to Interior for various purposes specified by Agriculture.

The fishing industry presented an effective and unanimous front in the first round of the fight for the bill —but this strong showing before a Senate sub-committee should not be taken to mean that the battle is won, or will be an easy one.

### *Agriculture and State Opposed to Measure*

No voice was raised before the Duff sub-committee against the bill, but there are powerful voices which evidently were only resting for the main event.

First of them in Agriculture. Originally, this enormously influential department indicated outright opposition. Before the Duff hearing it was reported that Agriculture had "modified" its position, although no details were given. Cynical commentators were of the opinion that Agriculture's "modified" opposition still would remain a most formidable obstacle.

Department of State was also reported lurking in the bushes and waiting for a good time to spring.

Department of the Interior, as expected, put a favorable statement in the record, and Arnie J. Suomela, assistant director of the Fish and Wildlife Service, testified vigorously as to the need for funds with which to conduct more comprehensive biological research.

The serious extent of departmental opposition, however, was evidenced to informed observers by the fact that the Bureau of the Budget took no position. This is the course it normally follows when there is sharp disagreement between governmental departments on a bill. It was understood also that the Budget Bureau has served notice of its objection to the principle of earmarking funds, as the Saltonstall Bill does, for specific industries.

### *"Me Too" Tactics Will Peril Progress*

Even if divergent departmental viewpoints can be harmonized, the Saltonstall Bill will face a heavy fight on the floor of Congress, principally as result of the "Me too," "Lemme in" tactics of other industries and their spokesmen, who almost inevitably will seek to get into the act.

Recognizing that the road is rocky, the fishing industry nevertheless seems to be girding itself for a real race. The need is so evident, particularly for biological research of truly scientific character; and the stake is so great—actually the future of a rich natural resource—that the measure merits not only the unanimous but also the intense and continuous support of the entire industry.

### *The Need Is Great, And the Reward Rich*

For example, there is the question of funds for the research work which will have to be undertaken under the program of the International North Pacific Fisheries Commission. Again, there is the crying need for adequate financing of the researches of the Interamerican Tropical Tuna Commission. Beside this, lack of adequate research through the long years of Federal responsibility for the salmon resource of Alaska has seen definite decline despite administrative restrictions so severe as to make almost impossible continued operation of the industry which makes the resource available for food.

The Saltonstall bill offers a way to finance scientific studies which can rehabilitate the nation's fishery resources—offers a challenge to the industry, to Congress and to the American people to bring about sound support for essential science.

## Long-Line Albacore In "Transition Zone"

Successful longlining for Albacore in waters well to the north of Hawaii found the fish in a "transition zone" between ocean currents, according to details of the discovery received from Pacific Oceanic Fishery Investigations, whose research vessels were the first Americans to take Albacore in this general area.

The fish were taken in a zone between 32 and 36° North latitude, along the 160th meridian of longitude, in waters with surface temperature of 62°. The productive region seemed to be in a zone between the cold, easterly-flowing North Pacific Drift and the warm, westerly-flowing North Equatorial Current.

Plankton tows, as well as the stomach contents of the tuna, sharks and lancet fish taken indicated that this is a rich feeding zone. Stomachs were unusually full of sauries, hatchet fish, shrimp, squid and other organisms.

Average weight of the Albacore taken was an extraordinary 60 lbs.

# Growth Beyond Belief

Growth beyond the wildest dreams of fancy was recorded by fish sticks in the first year of their introduction —1953.

The first half-year saw the sale of 483,500 lbs. of breaded and fried fish sticks.

The next six months witnessed sales of 6,778,500 lbs.

In December, fish sticks sold at the rate of 2,811,400 lbs., and there is good reason to believe that during the first four months this spring the volume of sales ran at a rate exceeding that of December.

Continuation of the rate registered in December, 1953, through the current year would produce 1954 sales in excess of 30,000,000 lbs.

It is not possible to give at this time the species composition of the fish stick sales, but there can be no doubt that cod accounts for perhaps 75% of the business in 1953 was cod.

Monthly sales of fish sticks in 1953, as compiled by the Fish and Wildlife Service were:

| Month | Pounds |
|---|---|
| January | 115,000 |
| February | 133,000 |
| March | 148,000 |
| April | 34,900 |
| May | 21,800 |
| June | 30,800 |
| July | 312,500 |
| August | 357,600 |
| September | 681,600 |
| October | 1,186,000 |
| November | 1,429,400 |
| December | 2,811,400 |
| Total | 7,262,000 |

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# SOCKEYE CATECHISM

## Royal Scans the Data Bearing on the Fraser Run Due this Summer

**The 1954 run of Sockeye on the Fraser River will probably be larger than that of 1950 (which was disappointing), and all signs point to an increase in the Adams River run over the previous cycle year, according to Loyd Royal, director of the International Pacific Salmon Fisheries Commission.**

**For the past several years Pacific Fisherman has been privileged to publish a question-and-answer summary of the outstanding factors affecting the Fraser River Sockeye fishery through the co-operation of Mr. Royal, whose position gives him unique opportunity to analyze the many diverse conditions likely to influence the run from year to year.**

**In spite of his qualifications, Mr. Royal would be the first to admit that forecasting the nature and volume of the Sockeye run is generally a precarious business, even though the success of the conservation and other regulatory measures made effective by the Commission have reduced the hazards to some extent.**

**Making allowance for the imponderables, here are the questions put to Mr. Royal a few days ago at his office in New Westminster, B. C., by Pacific Fisherman, and his answers:**

**Question: What is the historical background of the 1954 Fraser River sockeye cycle?**

**Answer:** Prior to 1913, so far as is known no individual race contributed heavily to the catch of this cycle. The racial runs were small individually because all important upriver spawning areas produced at a dominant rate in the preceding year (1913-1953 cycle). Because of Hell's Gate, the total pack decreased from 533,000 cases in the cycle-year 1914 to 70,000 cases in 1918. Beginning in 1922, when the Adams River splash dam ceased operating, the lower Adams River run established dominant productivity on this 1914-1954 cycle. From a spawning of only 20,000 fish in 1922 the run increased to approximately 5,000,000 fish in 1930, only two cycles later. Because of further increases in the size of the Adams River run the cyclic catch record was broken in 1946 when 690,000 cases were packed. The current cycle-year (1954) remains relatively unimportant without the Adams River run. This run has not been seriously interfered with since 1922 except in 1946 when its spawning migration was delayed by low water in the Fraser River.

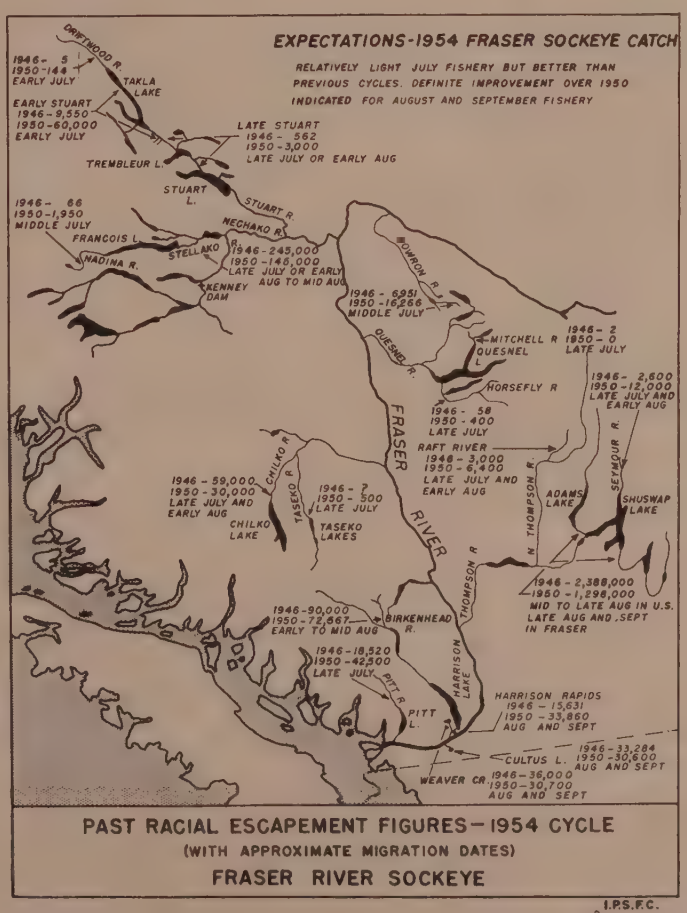
**Question: What is the cyclic pack record in cases since the Hell's Gate slide?**

**Answer:**

| | | | |
|---|---|---|---|
| 1914 | 533,000 | 1934 | 492,000 |
| 1918 | 70,000 | 1938 | 321,000 |
| 1922 | 100,000 | 1942 | 690,000 |
| 1926 | 130,000 | 1946 | 611,000 |
| 1930 | 456,000 | 1950 | 198,000 |

**Question: What races of sockeye are expected to contribute to the July fishery, and at what time is each available?**

**Answer:** The run of each race through the fishery lasts about 30 days, but the peak is usually confined within a seven-day period. The Early Stuart race, which peaks in the U. S. fishery about July 5, will be the first race to appear. This run will be followed by the Bowron and Nadina runs, which peak about the middle of July. The Pitt River run will appear next, followed by a combination of the Chilko, Raft, and Seymour runs, which peak at the end of July and extend into early August. In 1953 the Stellake and Late Stuart runs appeared in the U. S. fishery in late July, but their peak migrations normally occur in early August. There is a lag of from one to two days in the arrival of the fish in the Fraser River fishery.



**Question: Since the Fraser River sockeye fishery was closed almost entirely in July, 1950, and in July, 1946, why does the Commission staff predict a relatively poor July fishery in 1954?**

**Answer:** The 1954 Early Stuart run is following a highly productive year (1953) at Stuart Lake, and productivity is usually low in such cases. This was true of the 1950 Early Stuart run, which followed the large 1949 run. Bowron has never been a heavy producer, and the 1954 cycle run to Chilko has always been poor. The Chilko run of 1950 was the poorest of the last four years. The escapements to all other areas producing July runs were too small individually to produce economically important runs. If the 1954 Stellako run migrates in late July as it did in 1953, catches in late July will exceed normal expectations.

**Question: What races are expected to contribute to the August fishery, and what time is each available?**

**Answer:** During the first half of August the run should consist primarily of Stellako and Birkenhead, with the catches gradually strengthened by an increasing number of available Adams River sockeye. The all important Adams run should reach its peak in the U. S. fishery between August 20 and 27.

**Question: Was the escapement of the Adams River run satisfactory in 1950, and were physical conditions favorable for reproduction?**

**Answer:** The number of spawners in the 1950 Adams River escapement was considered to be **adequate**, and all known and measured physical conditions relating to the spawning were considered to be very satisfactory.

**Question: While, admittedly, the Commission staff does not recognize the abundance of three-year-old jacks as a reliable indication of the run to follow, what would the number of jacks appearing in 1953 in the way of racial runs in 1954 if their relative number were a reliable indicator of the run to follow?**

**Answer:**

| Race | 1950 Escapement | Unreliable Jack Indications 1954 Run |
|---|---|---|
| Early Stuart | 60,000 | Poor |
| Bowron | 16,266 | Good |
| Nadina | 1,950 | Good |
| Chilko | 29,800 | Poor |
| Seymour | 12,000 | Fair |
| Birkenhead | 72,567 | Fair |
| Stellako | 145,000 | Excellent |
| Adams | 1,298,000 | Excellent |
| Cultus | 30,595 | Good |
| Weaver | 30,700 | Good |

**Question: On the basis of all observations made, do you have any general comments about the expected size of the 1954 run of Fraser sockeye?**

**Answer:** The 1954 run shows every indication that it will be larger than the 1950 run. All known and measured conditions point to an increase in the Adams River run, and the Adams jack run of 1953 tends to support the evidence of good spawning conditions and the large fry hatch as indicators of an improved run in 1954. It should be pointed out that although this year's Adams River jack run was the largest ever recorded the large run of sockeye in 1946 (10,000,000) was preceded by a relatively small number of jacks while the 1930 Adams sockeye ru of about 5,000,000 fish was precede (1929) by a very large jack run.

All evidence points to a good Ste lako run except the large size of th seaward migrants. Usually a larg adult run is produced by small-size seaward migrants. These seawar migrants are usually small becaus of food competition among the larg number of fingerlings in the lak rearing area.

The July catch should be substar tially larger than that taken in Jul of the last cycle-year during whic there was a July fishery (1942), whe the total catch of both countries t August 1 was 290,000 sockeye.

# Canada Limits Licenses To Cut Fishing Pressure

Commercial fishing licenses in effect in British Columbia are to be restricted to Canadian citizens, according to announcement by Fisheries Minister James Sinclair. This applies to all species of fish including halibut, salmon and herring.

Mr. Sinclair says that such a restriction would have been put into effect before this if he had had any definite recommendation from the fishermen themselves.

The new order will not be retroactive, so British subjects now holding licenses can have their licenses renewed, but they will have to take out citizenship papers when their five years' residence in Canada is completed. All new applicants will have to be either natural-born Canadians, other British subjects who have acquired Canadian citizenship after five years' residence in Canada, or other immigrants who became naturalized Canadians after five years' residence in Canada.

Mr. Sinclair said that the fishing industry on the Pacific coast has two or three times as much boats and gear as are really needed to harvest the controlled fishery; nylon nets of greatly increased catching power, electronic devices to help locate fish, radio telephones, etc. The same number of fish must still get to the spawning grounds to maintain the resource, so to conserve the fishery it was necessary to increase the restrictions — longer closed periods, shorter seasons, more restrictions on the size of fishing gear, extension of boundaries away from spawning areas.

But all these restrictions, the minister pointed out, do not result in increased productivity per man, as was achieved in other industry, but just the opposite. They bring higher unit costs and make it harder to sell fish in competition with other food products. The answer? Mr. Sinclair said the first was license limitation and that this was being achieved The second was to make sure tha the most efficient equipment wa being used. The third was by are restriction, as had been done at th mouth of the Naas, the Skeena an Rivers Inlet.

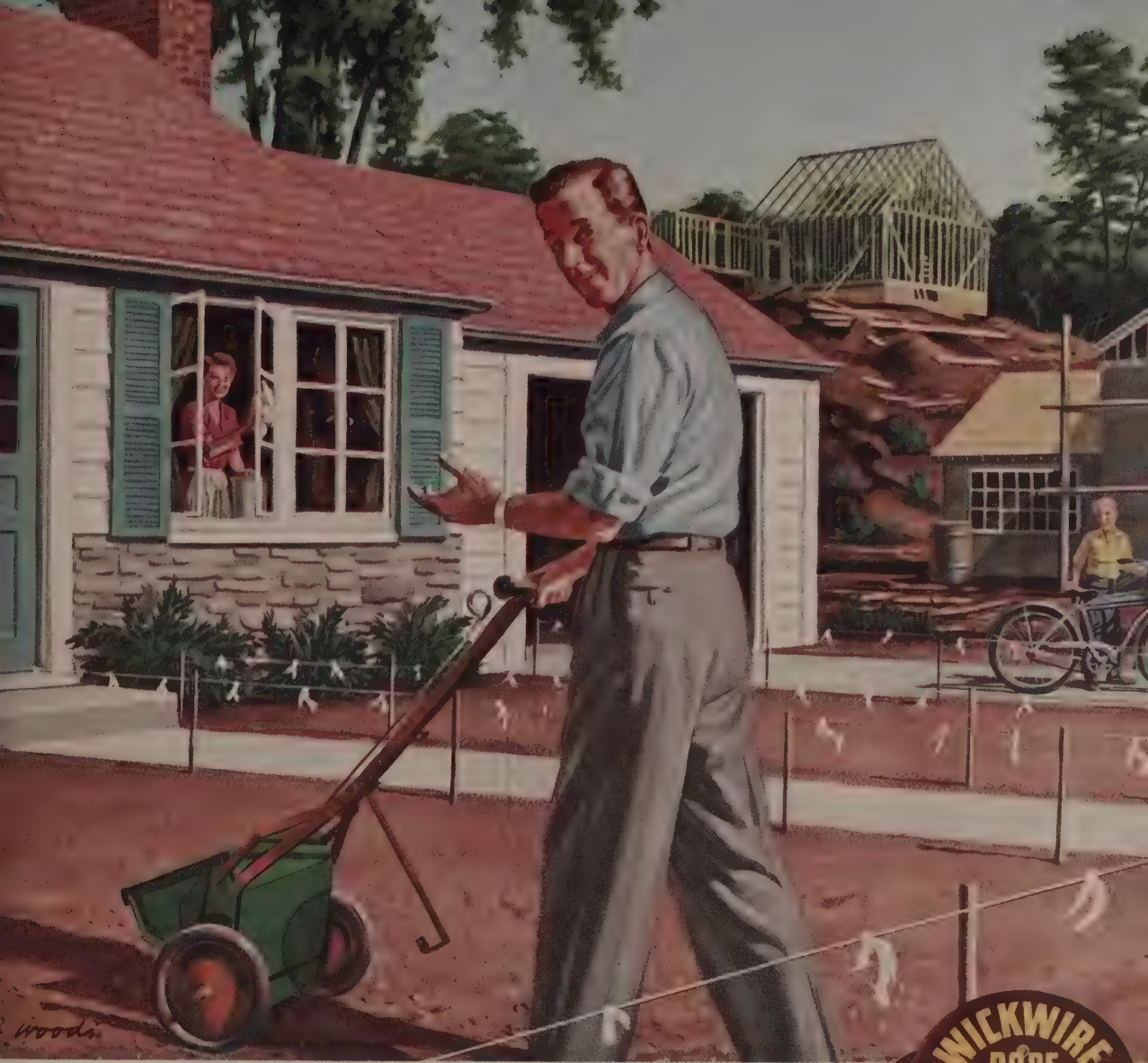
The Fraser was the only one i which there had not been thi downstream movement of the fish ing boundary, and it was in con formity with that policy that thi year the season above Westminste bridge will be closed September 1 as far as Chums and Pinks ar concerned. The fishery above th bridge, he contends, should neve have been permitted.

## Salmon Lose in Fight To Save the Cowlitz

Efforts of the State of Washingto to maintain a sanctuary for salmo in the Cowlitz River, the only majo stream in the Columbia system no impaired by dams, apparently suf fered fatal reverse in April when th Supreme Court of the United State refused to review the action of th Federal Power Commission in grant ing a license to the City of Tacoma for constructing dams on the Cowlitz despite a state law which forbid structures destructive of fish life.

While state counsel was quoted a saying this closed the case, it is con sidered possible that actual start o operations—which may be long de layed — might bring an injunctio action in state courts to prevent a municipality from building struc tures in violation of state law, eve though it might have a federa license to do so.

This point is not believed to have been raised thus far in the legal actions designed to maintain this last sanctuary for salmon.



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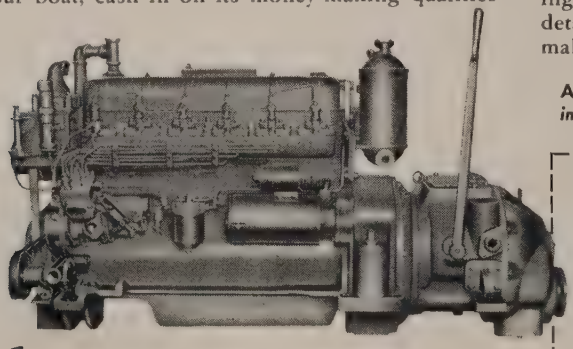

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**A fair sample of Pacific Fisheries Technologists in their annual session, held this spring at the School of Fisheries, University of Washington, Seattle, with active technologists present from Alaska, British Columbia, Washington, Oregon, California and Hawaii.**

# Technologists Eye Profit Potentials Over Pure Science

CARBOXYLS inevitably intruded into a good deal of the discussion at the March meeting of the Pacific Fisheries Technologists, held at the Fisheries Center, University of Washington, but concern with salability and profit potential obviously was the dominant, and growing, interest of the technologists.

In other words, this group, broadly representative of a great triangle running from Alaska to Southern California to Hawaii, was devoted to the profit motive rather than the airy aims of pure science.

### *Fish Sticks and Tuna Pies Are Topic No. 1*

Front-runner among the topics touched was that of the "ready-to-heat; ready-to-eat" product, particularly fish sticks and tuna pies.

Storage life of goods of this type seemed a point of primary concern to the technologists; with rancidity resistance and the tendency of "gravies" to separate recognized as present ranking problems.

Sales potential of sticks and pies was counted very large indeed, provided quality is well maintained; and there was sharp interest in the conditions and characteristics which are primary contributors to popularity.

In the case of sticks, convenience was recognized as foremost, with the fact that they can be readied for the table without thawing—whether ready-fried or raw-frozen—was considered of great importance by some commentators.

### *Way Is Wide Open To Any Food Firm*

That tuna pies and fish sticks offer an open door for food processors of several sorts to pack fish products with no previous stake or experience in the fish business was readily recognized; and it was pointed out that most tuna pies are being produced by houses which specialize in packing chicken pies and other items for frozen food cabinet distribution. Fish sticks frying may prove an easy and attractive addition to the products of an outfit built on frozen French-fried potatoes; and imported fish frozen in blocks—and even sawed into sticks—are being offered to such outlets.

The rise of shellfish chowders, soups, stews, and bisques—particularly **cooked products frozen in cans**—but not sterilized in them—came in for interested comment from the technols. While these products have not attained prominence on the Pacific, they have made noteworthy advances in other markets. Popularity was based on claimed flavor advantages where the soups were preserved by freezing rather than heat sterilization in the hermetically sealed container.

### *"Make It Look Easy"*

One of the most interesting comments on almost-ready foods came from one whose specialty is sufficiently detached to render his observations particularly objective—Bruce Sanford, FAWS, Seattle. He said: "In selling these products you should emphasize the ease and quickness angle. Too often the legends on the package obscure these advantages. Don't make your package directions appear **difficult.** Make it sound **easy** to serve this article. Don't make it sound **hard** by complicated instructions".

### *Economic Possibilities Of Fish Oils Unfolding*

"Many possibilities" remain unfolded in the higher chemistry of fish oils, Dr. Lyle Swain, president-elect, told the Technologists, saying: "There are qualities unique to fish oils which may some day give them far higher economic standing as chemical materials than is now the case. . . . Some of their fractions have excellent therapeutic characteristics, as bactericides, and in the treatment of some diseases such as silico-tuberculosis".

### *Officers for Year 1954*

Dr. Lyle Swain of the Fisheries Research Board of Canada's Pacific technological laboratory, Vancouver, was elected president of the Pacific Fishery Technologists for the 1954-5 term, succeeding Phil Callahan of Libby, McNeill & Libby, Seattle. P. A. Sunderland of the British Columbia Packers, Ltd., Vancouver, was elected secretary-treasurer.

The executive board, composed of regional representatives is composed for the current year of:

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**Alaska** — John Dassow, Fish and Wildlife Service, Ketchikan.

**British Columbia**—Sun Yip, Canadian Fishing Co., Vancouver.

**Washington**—Joseph Stern, School of Fisheries, Seattle.

**Oregon**—Scott McLeod, Columbia River Packers Association, Astoria.

**California**—George Courtney, Van Camp Sea Food Co., Terminal Island.

**Hawaii**—Fred Jermann, Hawaiian Tuna Packers, Ltd.

### *Questions and Answers Productive of Ideas*

The Q. and A. session was highlighted by the annual question—always asked, never yet answered: Who was responsible for the overalls ingredient in "Mrs. Murphy's" brand chowder?

Some of the questions and some of the answers:

**What is the effect of pre-cook and freshness on pressure extract of canned tuna?** Answer: While excessive pre-cook cuts down the amount of press extract, freshness has little effect.

**How important are preservative ices?** Answers: "There is a tendency to rely too much on such ices. Short hauls are more important and cost less. Good fish, good ice and good treatment are enough". (P. A. Sunderland) "Preservative ice should not be relied upon to prolong a trip unduly. Best practice is to make its use unnecessary by cleanliness and speed". (Neal Carter).

**What is the storage life of shucked Pacific oysters in cans in crushed ice?** Answers: Too many considerations involved for positive answer. Storage life affected by source of oysters; temperature of the water: degree of pollution, if any; how long out of water before opening; how promptly chilled; size of container; species. Granted no seriously unfavorable condition, at least 10 days, probably 12; possibly as much as 14 at the outer limit.

**What is the effect of antibiotic treatment of storage life of shucked oysters?** Answer: Not known, because it is extremely doubtful if the Food and Drug Administration would sanction the use of antibiotics in connection with any food products. (Dick Simmons).

**What is the possibility of compulsory government inspection of landed fish in the United States and Canada?** Answers: There is no present possibility of such compulsory inspection in the United States; although operators can arrange to have the Department of Agriculture conduct such inspection on a voluntary basis. (Maurice Stansby, FAWS). Canada is now studying desirability of applying inspection to fresh and frozen fish, as is now done in the case of canned fish. (Neal Carter, FRB).

**OFFICERS OF PACIFIC FISHERIES TECHNOLOGISTS**
**Upper, from the left: Roy Stevens, retiring secretary; Phil Callahan, retiring president; Lyle Swain, new president; P. A. Sunderland, new secretary. Lower, regional representatives, from the left: George Courtney, California; Joseph Stern, Washington; Sun Yip, British Columbia; John Dassow, Alaska; Fred Jermann, Hawaii. (Scott McLeod, Oregon, not available for photo.)**

**Should fish sticks be labelled as to species?** Answer: There is as yet no definite, official position; but the consensus was that "someone will get into trouble" on this point eventually if labelling is not specific as to species.

**How best to eliminate curd on canned salmon?** Answers: Dipping in a solution of tartaric acid has favorable effect: and does not affect the color of the fish. (John Dassow). "The trick seems to be to treat the surface with a strong brine, and then to wash it off; but this may result in bleaching of the surface color". (Dick Simmons). "Prompt retorting after the cans are filled will help." (P. A. Sunderland).

**How long can Pacific crab be kept alive out of water?** Answer: While crab can be kept alive out of water for some time if kept cold and damp, viability is not nearly so long as in the case of lobsters. Ice should never be allowed to come into contact with live crabs.

Most complicated question dropped into the Technologists' Question Box had to do with the canning of frozen salmon. The question was divided into six parts, which are stated and answered below. All answers are by Maurice Stansby, except as otherwise indicated.

**1. What type of freezing is best in the case of salmon to be canned subsequently?** Answer: In the case of such an operation as that involving Bristol Bay, brine freezing is the only method practicable. Salmon does not absorb salt excessively in the freezing process.

**2. What is the maximum period that salmon may be held prior to freezing?** Answer: The storage limit depends upon the species of salmon; whether or not it has been glazed; and particularly the storage temperature at which it is held.

**3. What is the best thawing procedure?** Answer: Thaw slowly in cold running water.

**4. What packing procedure is recommended for fish that have been frozen?** Answer: Standard packing procedure, except that care should be used in salting, lest residual salt from the freezing brine, plus that added in canning, be excessive. Efforts to avoid curd formation might be desirable. (See earlier question and answers on this point.)

**5. What important differences are there in the finished product as compared with that packed from unfrozen fish?** Answer: Granted good handling, the differences are: (a) more curd; (b) less free oil; (c) "firmer" texture. If held too long, the fish may have "freezer burn". If improperly thawed and seasoned, it may be too salty. Walter Yonker: "Freezer burn odor and flavor is the biggest problem we encounter with salmon canned from frozen fish".

**6. What consumer reactions are noted to salmon canned from frozen fish?** Answers: "Apart from the trained and critical buyer of canned salmon, consumer reactions have not been sufficiently definite to indicate a preference." John Dassow: "Ketchikan people acting as samplers on tasting panels at the laboratory there generally have reacted adversely to the product canned from frozen fish."

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# Processing Pismo clam Chowder

Condensed into six scenes, here is the pictorial story of how Inspectors Seafood Co., Los Angeles, packs Pismo clam chowder, marketed by Gouley-Burcham Co. Dug on the beaches of Lower California, the clams are opened, cleaned, packed in 30-lb. cans, refrigerated, and rushed by truck to Los Angeles. There they pass through six primary steps, as shown in order by the pictures of the panel, and are sold as shown below.

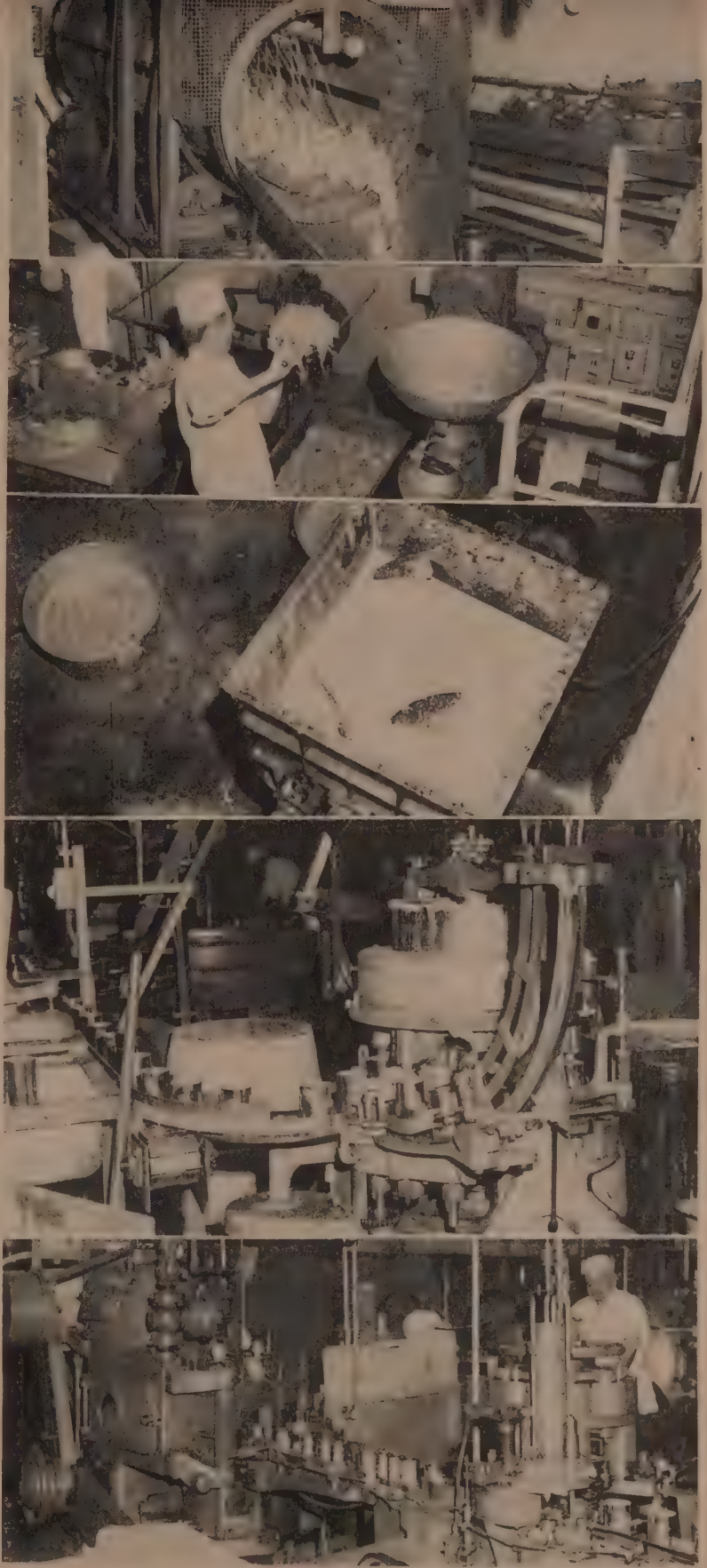
First—The clam meats are washed thoroughly in a Food Machinery & Chemical Corporation trommel rotary washer.

Second — The washed clams are minced in a Smith food grinder.

Third—Minced clams, chopped celery, dehydrated onions, dehydrated potatoes and bacon are blended in a Smith food mixer.

Fourth—Semi-solid mixture, constantly agitated to prevent ingredients settling, with resulting uneven consistency, is filled into 15½-oz. cans by a Food Machinery M. and S. stainless steel filler.

Fifth — Cans are topped-off with clam nectar, seasoned with salt and monosodium glutamate before they go into this Continental Can Co. vacuum closing machine.



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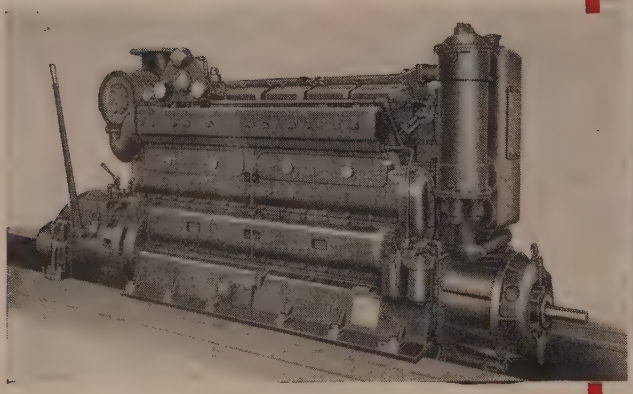

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The pictures show examples of ATLAS-powered "standouts at sea."

For information on how dependable and economical Atlas and Superior Diesels can help to establish record hauls for your fishing craft, ask your nearest Superior-Atlas representative. Ask, too, for a copy of the new bulletin on the Atlas Model 35 Diesel.

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**Prominent figures at the recent meeting of the Fisheries Research Board of Canada in conference with Dr. J. L. Kask, right, its chairman. Others seated are: Dr. W. A. Clemens, University of British Columbia, and R. E. Walker, vice president, B. C. Packers, Ltd. Standing: K. F. Harding, general manager of the Prince Rupert Fishermen's Co-operative Federation; Dean I. M. Fraser, Otto Young and Stewart Bates, deputy minister of fisheries and chairman of the International North Pacific Fisheries Commission.**

## Roy B. Earling Heads Interior's Alaska Team

Scrutiny of the various functions of the Department of the Interior in Alaska has been placed in the hands of a "team" headed by Roy B. Earling of Seattle, a consulting mining engineer with long residence in the Territory.

With him on the team are: Glen Duncan of Haines, Ore.; Gilbert H. Jertberg of Fresno, Calif.; and Robert Coote, a member of Interior's technical review staff.

Mr. Earling is widely known in Alaska, having served for many years as the manager of the Fairbanks Exploration Department of the United States Smelting, Refining and Mining Co.; and for some time prior to his retirement as vice president of this great company, in charge of all its Alaska operations.

He made his home in Fairbanks for many years and has traveled widely throughout all Alaska.

Mr. Earling's appointment continues the exceptionally high standard of the appointments which have been made to these technical review teams of the Department of the Interior. He is well qualified on all counts, training, experience, intelligence and character.

## C. O. Moberg Re-elected Union Co-Op President

C. O. Moberg was re-elected president of the Union Fishermen's Co-operative Packing Co. at its annual meeting recently. Rolf Ostrem continues as manager of the company, which has been packing quality salmon on the Columbia River for more than 50 years.

Directors elected to the company board were Tony Danielovich, Jacob Pietarila, Moberg, Elmer Astala, William Puustinen, Mike Haggren, vice president; Harold Niemi, secretary; Reino Niemi and Wayne Suti, second vice president.

# Skipjack Potential Vast; Sea Scouting Beats Air

Vast potential of the Hawaiian Skipjack fishery—providing the bait problem can be solved—is indicated by O. E. Sette, director of the Pacific Oceanic Fisheries Investigations, Honolulu, on the study made of these tuna by scouting in recent months.

"The abundance of these schools continued high from close inshore to a distance of 350 miles south and west of Oahu," he said. "At the same time, the Hawaiian sampan fleet was catching three-fourths of its catch within 20 miles of land."

Scouting by means of airplanes proved disappointing; about 10 times as many schools being seen over comparable areas by surface vessels as compared with those observed by the airplane.

This was believed to be due to the fact that the schools generally were located by the bird flocks working over them; and the dark birds common to the area were more easily seen from the surface than from the air.

Attacking the bait problem, POFI has studied extracts of tuna and other fish as attractants for tuna. Tuna in captivity developed responses to these extracts, but it appeared that they had to be "conditioned" for a time in order to manifest interest in the solutions.

Testing the extracts at sea gave no indication of measurable attraction, and it was concluded that the sense of smell, by itself, plays little part in the feeding of tuna in their natural environment.

Tests of the reactions of tuna visually showed that at sea they were attracted momentarily by shiny objects, but that visual artificial lures were not successful in holding the tuna at the boat.

Another attempt is to be made to develop an artificial lure which will seek to attract by motion as well as appearance.

## Canadian Frozen Chums Canned in Washington

Substantial quantities of Chum salmon were canned at Seattle and other Washington ports in March and early April from frozen fish imported from Canada.

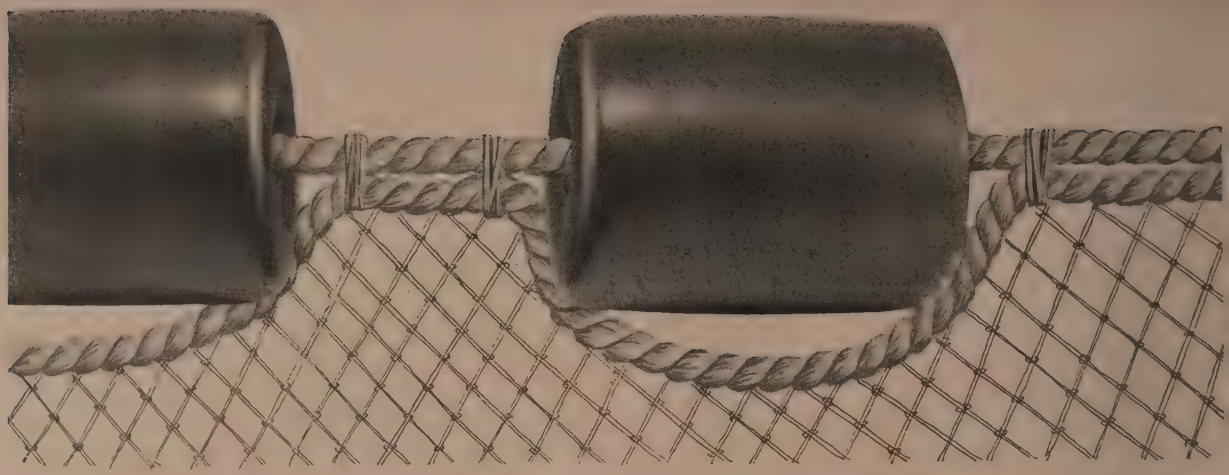
At least four canneries are said to have participated in this trade, which resulted from the exhaustion of the American supply of canned Chums.

Quantity packed at presstime was estimated at from 35,000 to 40,000 cases of talls.

The goods were said to have found ready market at $16 per case, although it is doubtful if they represented much profit at this figure. Cost of the Canadian fish laid-down in Seattle, duty paid, is said to have ranged from 17 to 18½c. Opinion of operators is that it would be extremely difficult to realize a profit at the upper range of these raw fish prices.

## Wilbur-Ellis Purchases T. I. Seafoods Plant

Wilbur-Ellis Company was high bidder in April for the building and machinery of the defunct Terminal Island Sea Foods Ltd., Terminal Island. Sold by the Reconstruction Finance Corporation by public auction, the San Francisco concern paid $50,000 for lease and physical property.



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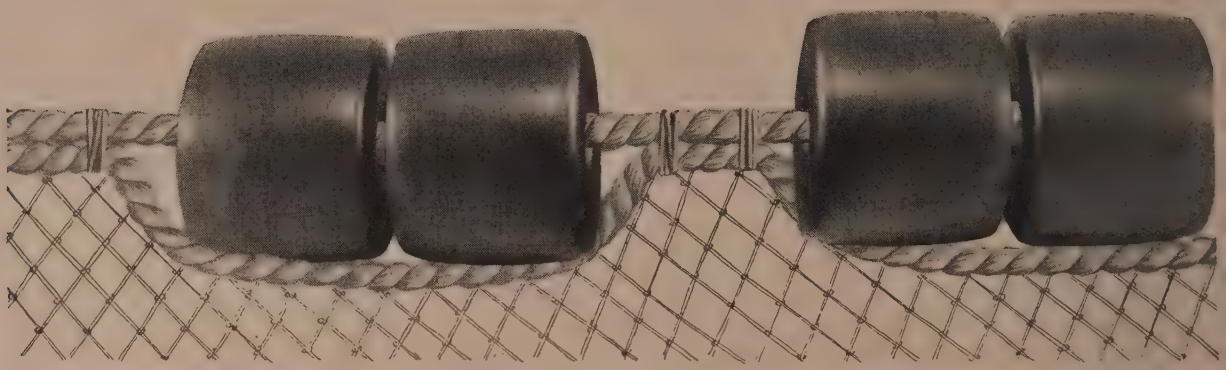

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PACIFIC Fisherman's NEWS

MAY 1954

# Japanese Catch Tagged Albacore Near Midway I.

The recovery of two more California-tagged Albacore by Japanese long-line fishermen has been announced by the California Fish and Game. A total of three Japanese-caught tagged Albacore has been reported thus far.

Both of the latest Albacore were caught on longline gear in the vicinity of Midway Island and both were from the same group of Albacore tagged in August, 1953, near Guadalupe Island.

Surmising the migration of these Albacore, it might be estimated that the Albacore traveled the circle route, north from Baja California. It would appear that these Albacore traveled approximately 3600 miles. The last two Albacore were in the water after tagging about half as long as the first recovered tagged Albacore, which was tagged near Catalina and caught 324 days later.

From August 11, the date of tagging, to Feb. 2, the date of recovery, the first of the recently recovered Albacore had grown from 33½", when tagged off Guadalupe, to 35" when picked up by long-line. Interestingly enough, the stomach of this first tagged Albacore was reported empty by the fishermen aboard the **Konpira-Maru No. 1.** This Albacore had been tagged with a Type F tag of clear vinylite tubing secured by braided nylon fishing line.

No. 2 tagged Albacore measured 36½" when tagged, 37½" when recaught.

California Fish and Game acknowledges the fine cooperation of Hideyuki Hotta and Masakaza Yao of the Tohoku Regional Fisheries Research Laboratory, Shiogama, Japan, and Hiroshi Nakamura, Director of Nankai Regional Fisheries Research Laboratory, Kochi, Japan, for their part in the return of the tags.

The second tagged Albacore was caught by **Sino Maru,** while fishing with long lines at Lat. 30 deg. 10′ N., Long. 178 deg. 54′ W., 150 miles NW of Midway Island, Feb. 23. It was tagged with a Type G vinylite tubing tag. The tagging of this group of Albacore was handled by the **N. B. Scofield.**

# Clipper Sinking Takes Two Lives

The loss of the tuna clipper **Sun Voyager** in early March brought death to the boat's chief engineer, Douglas Climo, and Barney Krimski, cook.

The 115′ boat sank in three minutes 120 miles north of equatorial Galapagos Islands. Capt. Frank Marino, skipper of the boat, and the remaining crew were picked up by the **Sea Preme.**

The few facts released regarding the sinking include these: about 125 miles northeast of Culpepper Island the **Sun Voyager** suddenly started to take water in her port bow. The boat listed heavily and sank. The chief engineer was said to be in the engineroom at the time of the sinking, the cook in the galley. Apparently neither had time to escape.

# Lokken Named U.S. Spokesman On I.L.O. Group

Harold E. Lokken, manager of the Fishing Vessel Owners Association, composed of the Seattle halibut fishing fleet, has been designated as the United States' employer representative on the International Labor Organization committee of experts on employment in the fishing industry, which will hold its first meeting at Geneva, Switzerland, Oct. 26, 1954.

Four nations will have employer representatives on this committee: the United States, the United Kingdom, Norway and Pakistan.

While Mr. Lokken has not yet been fully informed as to the field of the discussion, its possible effect and implications, it is understood that four points have been set-up for consideration at the initial meeting:

1. Minimum age of entry into the fishing industry;
2. Medical examination upon entry;
3. Working agreements;
4. Accident insurance.

Mr. Lokken is widely known and highly regarded in the American fishing industry. Beside having served his association as manager for more than a quarter-century, he has participated in numerous conferences of great importance, including the negotiation of the International North Pacific Fisheries Treaty, where he was a member of the American delegation.

## Tuna Imports Given Careful Geiger Checks

The hydrogen bomb explosion in the Pacific had its effect in Hoquiam this spring when Federal Food and Drug inspectors added Geiger counters to their equipment. They checked the tuna supply at Crown Packers March 23 and told Al Haas, superintendent of the plant, that Geiger counter checks will be standard procedure from now on.

No radio-activity was found since the tuna had been purchased prior to the explosion of the bomb.

Mr. Haas said the counter apparently had a range of 20 to 30 feet and the inspector did not have to examine every fish.

The company had ordered 1,000 tons of albacore from Japan, enough to keep his staff of 60 to 65 persons busy six to eight months. The fish is arriving in small shipments but he expects no difficulty from radioactive tuna.

The federal inspector said agents are checking the tuna before it leaves Japan and are making another check when it arrives in port.

## Pete Aspen Hurt

Pete Aspen, Seattle fisherman, was treated at St. Joseph hospital, Aberdeen, in March for injuries suffered aboard his fishing boat **Visit** off Grays Harbor.

Capt. Aspen caught his hand in a power unit connected with commercial fishing gear, and suffered severe lacerations and fractures. He radioed the coast guard and the Westport station provided ambulance service to transport Aspen to Aberdeen after he docked at Westhaven.

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**Here's the way the troller moorings at Sitka have looked since January, when a storm took out 400 ft. of protective floats. Through the masts are the buildings of Pyramid Fisheries, where Frank Wright, superintendent and general manager, provides a market for the local seiners' salmon. —Photo by Joe Ashby.**

# SITKA SOUNDINGS

Merle Enlow, skipper of the seiner **Argus,** with crew members Carl Kerr and Ed Van Horn, left Sitka recently to secure float logs for repairs to the small boat harbor, whose main float was blown across the channel during a wind storm in January. Money for the repair of the float has been received from the Territory. Work on the harbor was to begin by early April.

Robert L. Shields, skipper of the troller **Shelly,** has purchased the **Point Reyes,** a 65' packer from John Osbakken and Don McGraw. Bob has a contract to operate the station at Kalinin Bay. "It's my purpose to give service to all fishermen," he stated, "whether they are day boats or carry ice. A buyer will be on the scow and our price will be two cents under the Sitka price. We will only take a 2c carrying charge."

William Beach of the Beach Plumbing Shop, known to all Sitka fishermen as "Bill", passed away in March.

Richard Peters, skipper of the seiner **La Verne II,** and his family have returned from a three months stay in Los Angeles. Dick stated he was glad to be home as the rain in the southern city depressed him. It comes down there in bucketfuls.

George Youth from Seldovia is operating the Webb Marine Repair for Stockton and Catherine Webb while they make a trip to New York to visit Stockton's mother. Mr. Youth and his wife are living aboard the **Romany III** during Webbs absence. The Youths like Sitka and plan to live here indefinitely.

Henry Wood, skipper of the **Comedian,** has spent the winter improving his troller. He installed two new fuel oil tanks, put in a new

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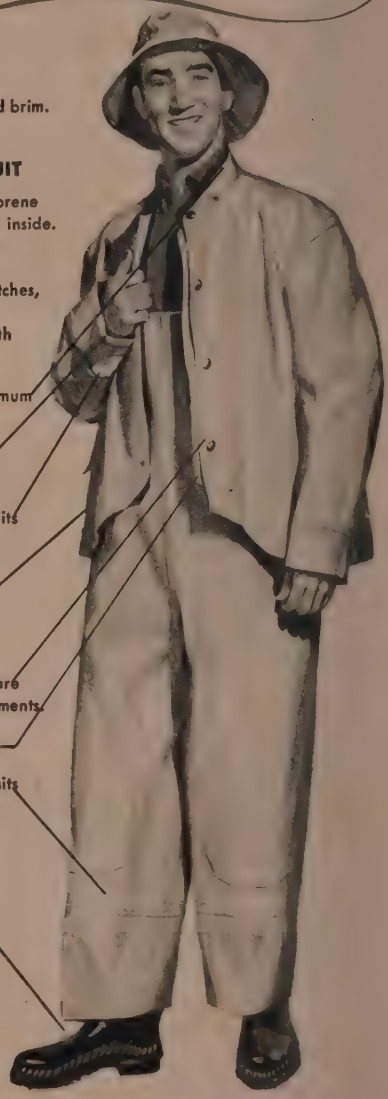

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bulkhead and lowered the floor in the pilot house. Mrs. Wood is leaving her position with the Sitka Cold Storage Company and will be on the **Comedian** part of the summer.

Rudy Sarvela, skipper of the **Myrth,** has spent the winter at Goddard Hot Springs building a clinker-built skiff.

## Trawl Mesh Studies Told in Research Paper

The Washington State Department of Fisheries has published its second issue of "Fisheries Research Papers." Included in the publication are articles dealing with the "English Sole in Holmes Harbor, "Selectivity of Cod-End Mesh Sizes in Otter-trawling," "New and Little Known Fishes of the Eastern Pacific," and several others.

An article by Jerry Jurkovich describes the effect of varying mesh size of otter trawl cod-ends on the catches of small English Sole. The tests were conducted aboard the commercial trawler **Panther,** in the region of Saratoga Passage, Northern Puget Sound. The data demonstrated that 84% of the sole caught with 3" cod ends were undersize while only 37% of those caught with the 4½" cod-end were unmarketable. The benefits summarized by the author for using 4½" mesh (between the knots) were a reduction in the killing of undersized fish and reduced time required to sort out the catches.

## Eureka Moves Toward Improved Boat Basin

Eureka City Harbor Commission has outlined a comprehensive program of repair and rehabilitation for the Small Boat Basin, home of the Humboldt Bay commercial fishing fleet.

Initial project in the program is the construction of a seawall to hold back mud and silt, to be followed by revamping of mooring facilities, storm sewer diversion, repair of some damaged floating pontoons, and dredging of the basin.

Cost of the entire program has been estimated at between $75,000 and $100,000.

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# SCOPE and SOUNDER

**Monthly digest of present-day pioneering methods and equipment in world fisheries.**

**By PETRALE***

## Esteban Petrale "Hole" Studied by Scientists Of State and Canada

Biologists of the Fisheries Research Board of Canada and of the Washington State Department of Fisheries have joined forces in a program designed to study the deep-water petrale sole stocks currently being fished off the Canadian coast.

During the past month, American boats landed extremely good catches of petrale from depths exceeding 180 fathoms. Biologists and fishermen alike are concerned with the possibility that this deep-water stock may be an aggregation of spawning fish which are subsequently fished on the inshore grounds during summer months. Researchers from both Canada and Washington have been sampling landings of these fish and at the time of writing had scheduled the Seattle trawler **Heather** to tag fish in the "Esteban Deep." Both Canadian and United States tags will be released.

## "Scofield" Trawl Study

Biologists working for the Pacific Marine Fisheries Commission were scheduled to start a study of various types of trawl gear beginning early this month. The researchers will test several types of hog-ring cod-ends and double mesh cod-ends. The study is a continuation of a program started several years ago to determine the effects of various types of trawl gear on fish catches. The research vessel **Scofield** will work out of Eureka.

## Mid-Water Phantom Trawl To Be Studied

The exploratory fishing vessel **John N. Cobb** has tentatively been scheduled for a six-week study of the use of a phantom mid-water trawl. The trip will begin around the middle of May. The investigators will test the gear in inside waters and in off-shore regions to determine its possible use for capturing certain trawl fish and other mid-water species. The phantom trawl uses specially designed wing type doors for spreading the net and a patented float. The depth of the gear is computed from the wire angle and the cable out.

The results of the **John N. Cobb's** exploratory fishing survey in Yakutat Bay, Alaska, were published in the March issue of the Commercial Fisheries Review. The paper by Edward A. Schaefers describes the various types of gear used in the survey including a four tunnel shrimp trap. Several areas were found in Yakutat Bay which yielded good catches of pink shrimp. Over 1000 pounds per hour were caught in several drags. The report is well illustrated with photographs and charts showing the gear used and the areas fished.

## Undetected Diseases May Cause Fish Mortality

Scientists are inquiring into the possibility that hitherto undetected diseases may possibly be responsible for otherwise unexplained fluctuations in fish abundance.

At the Scripps Institution of Oceanography it has been found that


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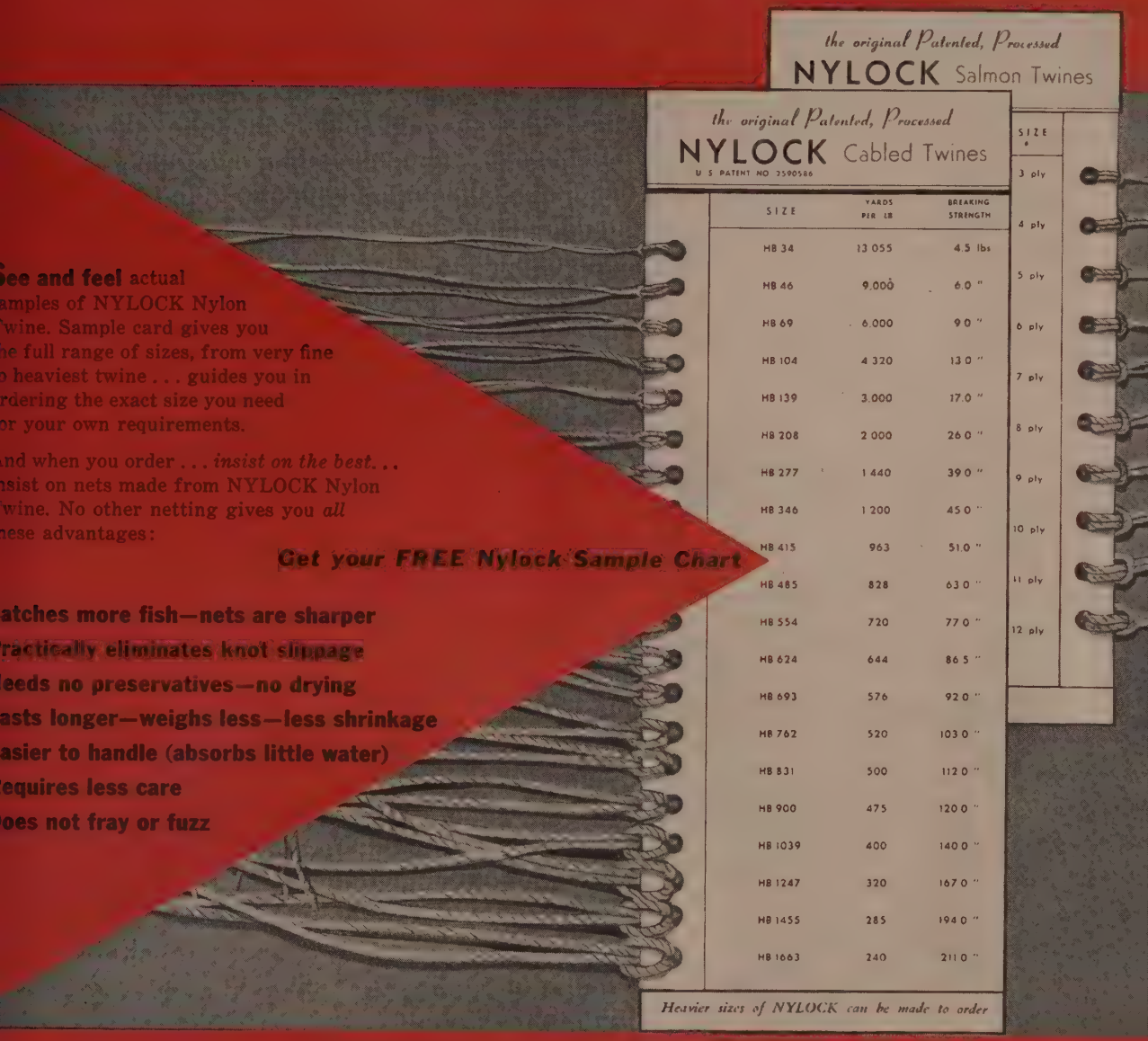

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**NYLOCK** Salmon Twines

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**NYLOCK** Cabled Twines
U. S. PATENT NO. 2590586

| SIZE | YARDS PER LB | BREAKING STRENGTH |
|---|---|---|
| HB 34 | 13 055 | 4.5 lbs |
| HB 46 | 9.000 | 6.0 " |
| HB 69 | 6.000 | 9.0 " |
| HB 104 | 4 320 | 13.0 " |
| HB 139 | 3.000 | 17.0 " |
| HB 208 | 2 000 | 26.0 " |
| HB 277 | 1 440 | 39.0 " |
| HB 346 | 1 200 | 45.0 " |
| HB 415 | 963 | 51.0 " |
| HB 485 | 828 | 63.0 " |
| HB 554 | 720 | 77.0 " |
| HB 624 | 644 | 86.5 " |
| HB 693 | 576 | 92.0 " |
| HB 762 | 520 | 103.0 " |
| HB 831 | 500 | 112.0 " |
| HB 900 | 475 | 120.0 " |
| HB 1039 | 400 | 140.0 " |
| HB 1247 | 320 | 167.0 " |
| HB 1455 | 285 | 194.0 " |
| HB 1663 | 240 | 211.0 " |

| SIZE | |
|---|---|
| 3 ply | |
| 4 ply | |
| 5 ply | |
| 6 ply | |
| 7 ply | |
| 8 ply | |
| 9 ply | |
| 10 ply | |
| 11 ply | |
| 12 ply | |

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- **Needs no preservatives—no drying**
- **Lasts longer—weighs less—less shrinkage**
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*PAULS FISH NET DIVISION, 357 W. Ohio St., Chicago, Ill.
*Divisions of The Linen Thread Co., Inc., 418 Grand St., Paterson, N. J.

THE FISH NET & TWINE CO., 310 Bergen Ave., Jersey City, N. J.
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Please send me your FREE NYLOCK Sample Chart.

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The CAPTAIN WHEELER, one of three National Park Service boats patrolling Lake Mead, with Hoover Dam water intake tower in the background. The 29-foot CAPTAIN WHEELER was built by Marine Steel Fabrication Company of Newport Beach, California. Her all-steel construction, Chrysler Crown Engine with 2½ to 1 reduction and hydraulic controls make the WHEELER an excellent boat for patrol, rescue and marine ranger work.

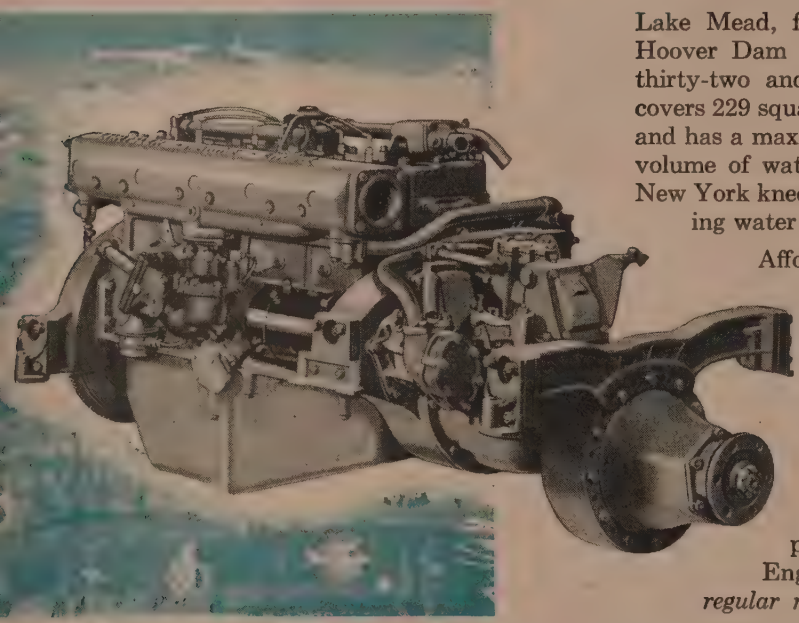
23 miles from Las Vegas, Nevada, and 80 miles from Kingman, Arizona, Lake Mead is fast becoming a vacation favorite for Americans who like boating, swimming and fishing amid breath-taking beauty.

# World's most dependable marine power

## *for world's largest man-made lake*

Lake Mead, formed in 1936 with the completion of Hoover Dam on the Colorado River, contains nearly thirty-two and a half *million* acre feet of water. It covers 229 square miles, is 115 navigable miles in length and has a maximum depth of 589 feet. This tremendous volume of water—enough to cover the entire State of New York knee deep—serves as a giant reservoir supplying water to a large part of the Southwest.

Affording excellent facilities, the Lake Mead National Recreational Area is open twelve months of every year under the supervision of the National Park Service. George F. Baggley, Superintendent, National Park Service boats—alert to every emergency—maintain their routine patrols the year round. Despite summer temperatures reaching as high as 116° the Department reports continued top performance from Chrysler Marine Engines *with no service necessary beyond regular maintenance.*



You won't find another marine engine offering as many quality features—*at no extra cost*—as Chrysler. For example, with every Chrysler Marine Engine you get:

**Storage battery, shifting lever, exhaust flange and propeller shaft flange coupling**
**Chrysler-exclusive reverse and reduction gears—finest in the industry—outperform, outlast any other**
**Full-flow oil filter—cleans *all* the oil for better lubrication**

Why not see *your* local Chrysler Marine Engine Dealer, or write: ***Dept. 135 Marine Engine Division, Chrysler Corporation, Trenton, Michigan.***

CHRYSLER

*America's No. 1 Marine Engine*

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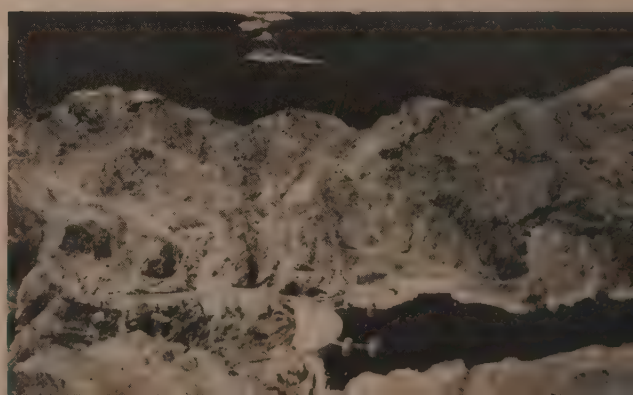
Cool blue water nestles between rocky canyon walls in this aerial view of Hoover Dam (foreground), and Lake Mead (right foreground and beyond).



certain lesions on the scale of fish could be detected by the human eye only when seen under water; and that these lesions held high bacterial concentrations.

Furthermore, an investigator working on the Pacific sardine program in California reported "abnormalities in up to 45% of sardine eggs collected off the Pacific Coast. The possibility that these abnormalities may have been caused by marine bacteria is expressed. The author cites several other instances of high marine fish mortalities which may have resulted from marine bacteria or pathogens and expresses the opinion that fish diseases are a significant factor in the natural mortality of marine fishes.

## F. K. Martinis Dies

Rosary services were held March 26 at San Pedro for Frank Keko Martinis, master of the **Bimbo**, who died in Bellingham, Wash.

Mass was said March 27 at Mary Star of the Sea.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Chrysler Marine Engines
SALES - INSTALLATION - SERVICE
COMPLETE ENGINE REPAIRS
AUTOLITE MARINE BATTERIES
KOHLER LIGHT PLANTS

**Fred Barnett's "Mary McTavish," a 38' Kettenburg Albacore boat, was recently re-powered with a 2-cylinder P & H diesel, supplied by Industrial and Marine Engines.**

## All California Boats Must Register, and Pay

Every boat used for commercial fishing in California — rowboat or clipper—must be registered with the Department of Fish and Game in 1954. Registration fee is $10 and the new law went into effect April 1. The law applies to seasonal operators as well as full-time commercial fishermen.

## "Steve" Stavenes Heads B. C. United Fishermen

H. "Steve" Stavenes, salmon and herring seiner and for many years active in organization affairs, was elected by acclamation as president of the United Fishermen and Allied Workers Union at the annual meeting in Vancouver, B. C. He succeeded Reg Payne, who did not stand for re-election. Other officers: Homer Stevens, secretary treasurer; Alex Gordon, business agent; Pete Jenewein, first vice president; Mickey Beagle, second vice president. All were returned by acclamation.

The general executive board consists of Reg Payne, Alf Christoffersen, Bob Ekrem, Harry Allison, Lorna Hart, Ed Bertram, Hans Hansen, Adeline Ratchford, Norman Turner, Roy Burnell, Dan Cordoni, Bert Goddard, Charles Schule, Pete Pavelich, Wally Paulik. Trustees are Aagoht Kopperud, Ben Chiste, Charles Person.


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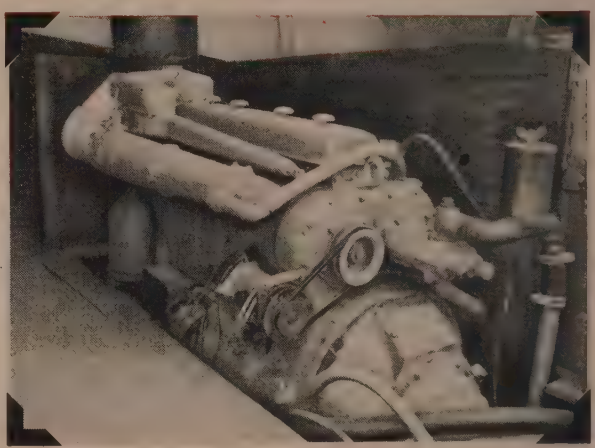
# STANDARD ENGINEER'S REPORT

**DATA**

| | |
|---|---|
| LUBRICANT | RPM Delo Oils |
| UNITS | Heavy-duty engines—diesel and gasoline |
| SERVICE | Fishing boats |
| CONDITIONS | Constant load |
| FIRM | H & M Sportfishers, Inc., San Diego, Calif. |

## One engine overhaul in 3 years on 8-boat fleet!



RPM DELO HEAVY DUTY LUBRICATING OIL is used in all boats operated by H & M Sportfishers, Inc., San Diego—a total of 12 engines ranging from 225 H.P. diesels in the "Worrier VII" (above) to a 60 H.P. gasoline unit. In 3 years of regular fishing-party service in coastal waters, only one engine required major repairs. Although this engine worked 5600 hours, only sleeves and pistons were replaced.

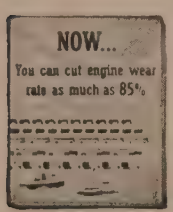
S. HOWARD MINOR, (right) Vice President and General Manager says, "RPM DELO Heavy Duty does such a good job of holding down repairs for us that I wouldn't consider even trying another oil."

### How RPM DELO Oils keep engines clean and prevent wear

A. Contain special additives that provide metal-adhesion qualities...keep oil on parts whether they are hot or cold, running or idle.

B. Anti-oxidant resists deterioration of oil and formation of lacquer...prevents ring-sticking. Detergent keeps parts clean, helps prevent scuffing.

C. Special compounds stop corrosion of any bearing metal, and oil foaming in both wet and dry sump engines.

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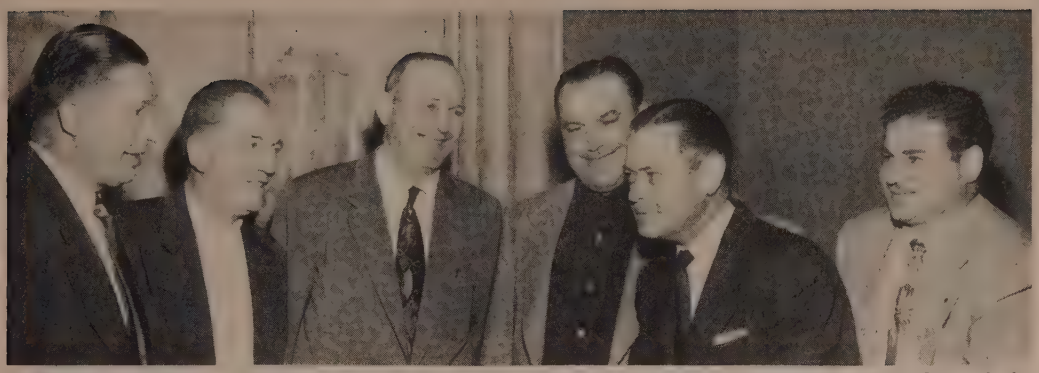
STANDARD OIL COMPANY OF CALIFORNIA



**California canning and fishing union officials hear O. R. Strackbein (second from right), of the nation-wide Committee on Labor, Industry & Agriculture, Washington, D. C., describe proposed bill to curb imports. (Left to right): L. Ballinger, secretary, and James Waugh, president, Cannery Workers & Fishermen's Union of Los Angeles Harbor Area; John Hawk, secretary, Seafarers International Union of N. A.; John Calise, secretary, Seine & Line Fishermen's Union; Mr. Strackbein, and Louis J. Sitta, representative, Cannery Workers Union.**

# SAN PEDRO SEINE SETS

**VICTORIA,** A. Larsen's bait boat, has been equipped with a new propulsion unit, a General Motors 610, 3¼:1 reduction. Grofton Diesel Engine supplied this motor as well as the generating set, a GM 271. . . . Geo. Moskovita's **Aurora** also has a new GM auxiliary, a 371, a Crofton installation. . . . Also the **Santa Lucia,** another GM 371. . . Star-Kist reports the unloading of more than 100 tuna boats since the first of January, according to Nick Bogdanovich of Plant No. 4. . . . The purse seiner **California** is said to have delivered her last tuna fare to the cannery at Puerto Rico, a load predominantly Yellowfin . . . this is her third trip since the first of the year —two loads went to Panama. . . .

**BETTY C,** operated by Mike Elich, has a new skiff, a 24x14, powered with a Chrysler Ace Special, 2½:1 reduction, 22x18 propeller. This skiff, as well as that for the **American Boy** (95-hp. Graymarine), **U. S. Liberator,** Joe Dragich (Chrysler), and **City Of Los Angeles** (Special), were built by Mardesich Bros. of San Pedro. . . . San Pedro Boat Works has installed a new 3" Monel shaft in the purse seiner **Endeavor,** and has overhauled the Twin Disc reduction gear. The boat is owned by Sam Randazzo. . . . The same yard re-coiled the fish holds for the **Lorraine A,** now fishing tuna. . . .

**JOHN R,** under new owners Bogdanovich and Travis, has been named the **Comet.** Travis was formerly engineer on the **Vagabond.** . . . Shepherd Marine, San Pedro, has installed a "Caterpillar" D318 in the **St. Christoper** to serve as an auxiliary. . . . John Marinkovich, new owner of the **Lorraine A,** has announced he plans to change the name of the seiner to **Janice M.** . . . Sam Randazzo's **Endeavor's** net was recently dipped in Techkote, supplied by Marine Hardware at Berth 73. . . . Seaside Supply Stores recently added the Benson Anchor to their line of marine equipment. . . . Rolf Sannes of this firm also reports success with the use of a vinyl plastic float, Aero Buoys, for use on gillnets fishing sea bass and barracuda. . . . Four San Pedro fishermen were fined in March for using a roundhaul net less than 750′ from the Redondo Beach pier: Frank Trama, Mate Bogdanovich, Gaetano Terranova and Amador Marseda. . . . Raymond Mitchell and Mrs. Mitchell recently opened their new home with a housewarming. He is an officer in Marine Hardware Co. . . . Homer Moore's boat, built last year in Long Beach, has been equipped with a Bendix Model DI-I, 100 fathoms. The boat is named **G.M.** . . .

MANY FISHERMEN ASK —

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BROWNIE SAYS —

FOUNDED IN 1844

**Filament nylon twine is nylon twine twisted from individual endless filaments of nylon. This twine, because of its clean cut nature and superior strength, is used for making the body of the best nets.**

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# SAN DIEGO BITE-SIZE ITEMS

The chief engineer of the sea fisheries department of the Indonesian government, B. B. Lokollo, stated in San Diego recently that his government planned to build and maintain 4,000 fishing boats for tuna and other species. Mr. Lokollo and his assistant, R. K. A. Prawira, are in San Diego to study fishing and refrigeration methods. . . . **St. Mary** was in trouble in mid-March off San Benedicto Island. Her skipper reported that there were several holes in the keel plate and that the engine was flooded, but there was no immediate danger. Louis Massa, owner, and Arthur DeFever, marine surveyor, flew to the scene to appraise the damage. . . .

TONY VELOSICH, formerly chief engineer on the **Santa Helena** and **Scarlet Queen,** has recently secured a part interest in Harbor Boat Building Co. . . . Garnet Stevens, former part owner of the **Sea Giant,** is reported to have left for Paita, Peru, to become port captain for National Marine Terminals Inc. . . . Carl Hanken of the **West Coast** has installed a Sea Scanar. . . . New in the tuna fleet: the use of a rubber lining for bait lines. The application is made eight times. . . . Something else new is the use of plastic pipes for all lines leading the two condensers, to condenser pumps and to the four ammonia compressors, etc. . . . More five-bladed propellers for the **White Star, Sun Victoria, Supreme, Sun Europe,** with the work all done at Campbell Machine Co. . . .

EDDIE SOARES VARLEY'S **Sun Victoria** has just had a new Goodrich Cutless bearing job. Tail shaft is 7¾ Monel, bearings are 7¾ ID—11½" OD. . . . Joe M. Medina has reconditioned his **Queen Mary.** His son-in-law, Joe Madruga, has taken the boat to sea. . . . Matt Monise, president of the Fish Mongers' Club, is planning a visit to Pico. . . . Harold "Pop" Morgan has had his **Chicken of the Sea** sandblasted. . . .

VERNON BOWMAN has set something of a record: he hasn't missed a trip aboard his **American Beauty** since 1948 and has concluded 35 trips. . . . Last word says the **Sea Magic,** scheduled first to deliver to the National Canning Co. at Puerto Rica, would bring her fish to San Diego. Manuel Rebiero is skipper. . . . Joseph C. Rogers is now running the **Valiant,** formerly the **Cal-Mar.** . . . Arnold Neves has temporary command of the **Constitution,** while regular skipper Manuel Neves takes a vacation. . . . Kettenburg Boat Works recently sold a Chrysler Imperial engine for Gerald Todd's boat **Sea Daddy,** 2:1 reduction. . . . Cook Morris McPheeters aboard the **Helen Ann** was seriously injured in the head when attacked with a fire ax by a crew member. . . .

**Wiley V. A.** will base at Paita, Peru, according to Wade Ambrose, owner. Her skipper is Arnold Regal; fish captain, Henry Dodds. . . . Eugene Cabral of the **Ecuador** expected to take the boat to sea again after an operation which hospitalized him in the early part of the year. . . . Lou Brito, captain of **Southern Pacific,** and Mary Carlos of San Diego were recently married. . . . Mr. and Mrs. Joe Correia became parents of their first child, a girl. He is captain and managing owner of the **Virginia R.**

## Alaska Fishermen's Union Opposes Initiative 192

Opposition of the Alaska Fishermen's Union, which has many members resident in the State of Washington, to Initiative 192 was announced in April by George Johansen, secretary-treasurer.

The initiative, for which petition signatures are being sought, would limit commercial fishing inside the "77 Line" in Puget Sound, except during the period of the Pink salmon runs of odd-numbered years, and after Oct. 5, when the Silver run largely has passed and the Chum run is due to begin.

Reef netting would be prohibited and gillnetting considerably curtailed.

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*Trevarno Glass Boat Fabric Protects Hull Surfaces Against*

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Trevarno Fabric covering for your wood hull assures you more time for fishing, cuts hauling costs, reduces hull maintenance expense! Trevarno Fabric bonds to hull, seals against leaks, gives you a stronger, better looking boat.

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Trevarno Boat "B" Fabric is scientifically engineered for commercial use. It has tremendous tensile strength, adds shock resistance to hulls and forms a permanent, invisible covering impervious to moisture, rot or petroleum fluids. Trevarno lasts the boat's lifetime—cuts yearly maintenance costs! Just paint resin and hardener on clean, dry hull. Smooth on Trevarno Boat "B" Fabric. Apply second coat of resin and hardener. Then, sand hull lightly and paint, *or leave it natural* (Trevarno lets the wood grain show through, adding to the beauty of your boat.)

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Trevarno Fabrics provide a permanent bonded surface that protects decks and cabin tops from leakage, scuffing, damage from sea and sun. Lightweight Trevarno Boat "A" Fabric is ideal for small boats, topside bulkheads, etc.

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Goebel

**Ted Brock's "Erm Too" carries two echo-sounders, one mounted at an angle and used to supplement the conventional vertically-mounted instrument in detecting schools of bait fish.**

# Angle-Mounted Echo-Sounder Used to Spot Bait Schools

Ted Brock, who makes a business of supplying California commercial and sport fishermen with live bait, has a new method of commercial fishing and bait hauling which is represented by an unusual installation of a depth recorder on the **Erm Too's** setting side. This echo sounder is in addition to that which has operated for some years on the **Erm Two,** which during the lush sardine fishing years set quite a few tonnage records.

The new echo sounder is mounted on the slant, working horizontally to record the sound return.

Brock has pioneered other fishing improvements, such as the use of a net puller. Both the **Erm Too** and the **City of Oceanside,** which Brock also operates, use these pullers.

This year Brock will try the use of a plane for spotting schools of bait, with Roger Hillhouse as scout.

To give further service to the Albacore fishermen using Brock's bait services in San Diego, Brock has bought the barge owned by Southern California Packing Co. and has put it into year-round operations, supplying live, salted, and refrigerated bait.

The **City of Oceanside** has been equipped with a 75-fathom Bendix, DR 10-A. The boat has worked successfully fishing rock cod at a depth of 200 feet during the past month.

## Herring Reduction Requests Rejected

Nine northern California fish processors applied to the Fish & Game Commission last month for permits to reduce herring, but were turned down.

Pt. Edith Fisheries, and Carquinez Fishery Ltd., Martinez; Northern Packing Corp., San Francisco; Winged Victory Fish Products, San Francisco; Hovden Food Products, Monterey; J-D Packing Co., San Francisco; and Vilicich Bros.; Tony Konitich, and C. E. McDaniel, all of Marshall on Tomales Bay, applied for permits to reduce herring.

Richard Croker, chief, marine fisheries branch, Department of Fish and Game, stated that the herring population is but a small fraction of the population of sardines years ago.

It was brought out though, that the marine fisheries branch did think that it would be possible in the future safely to set some amount that could be taken for reduction purposes.

## Co-Op.'s New Ice Plant Active at Westport

The Fishermen's Co-Operative Association's new ice plant on the Westhaven dock went into full production after the salmon season opened March 15. The flake ice plant has an output of about 20 tons daily and storage capacity for 60 tons or more.

In the 20 by 75-foot ice storage room of the new installation, there are nearly 2,500 feet of overhead piping that serve as the coils of the ice.

Roy Olsen, manager of the plant, said its capacity will be sufficient to service the needs of the association's 600 boats.

# Spoons Out-Fish Plugs in Canada Gear Comparison

Spoons outfished plugs by a wide margin in comparative gear experiments conducted off the Vancouver Island coast by Canadian investigators, according to report made by Dr. D. J. Milne of the Fisheries Research Board of Canada to the Pacific Marine Fisheries Commission.

In reporting on these gear selectivity experiments, he said that large and small sizes in both spoons and plugs were used, with these results:

"For Coho salmon, spoons were much superior to plugs and the smaller lure was preferred in each case. **The small spoon caught the most, the large spoon caught about four times as many fish as the small plug, and the large plug the least.** The size of fish was not markedly selected by the size or type of lure. For Spring salmon spoons also caught more fish than plugs but the larger lure was preferred in each type. The size of the fish was markedly selected by the size and type of lure. The small spoon caught more fish than the large plug but about the same weight of fish was taken in each case because one-half of the fish caught by the small spoon were under 26 inches total length, and only 10% of those caught by the large plug were small. The recent trend of using large plugs early in the season should result in catching fewer Coho and small Spring salmon.

"All Coho were taken at calculated depths between 5 and 10 fathoms (most at 5) and the Springs were taken between 10 to 15 fathoms (most at 15). Compared with temperature recordings this placed the Springs below the thermocline and the Coho often in or just below the zone of rapid change in temperature. There was no marked difference in the size of fish with depth in either species."

## New Diesels Installed In B. C. Fish Boats

Several Murphy diesel engines have recently been installed in British Columbia fishing vessels, Bill Merritt, Northern Equipment Co., distributors in the Vancouver area, reports.

A 150-hp. unit has been put into Joe and Kruno Boscowitz' **Neptune,** and a similar engine will power the **New Liverpool,** owned by Sylvester Carr and Joe Volkovich. A bigger engine, 190-hp., has been set up in Ernie Jensen's **B. C. Clipper.**

A new gillnetter being built on the Fraser River for R. McIlheeny, will have a 120-hp. Murphy.

**One of the best: Nick Marinkovich of the "New Sea Rover", found by PFN camera at Marine Hardware, San Pedro, with a new supply of Plymouth rope just before leaving for tuna grounds.**

## Howard Farrer Buying Troll Fish at Westport

Howard Farrer, who is well known to fishermen of the Washington coast, is in business independently as a fish buyer at Westport, Wash., this season.

Maintaining his headquarters on the Pacific Pearl Barge at the end of the Westport Fish Dock, he ships his fish to Seattle for sale over the Bay Fish Exchange.

Last year he represented Bay Fish at Westport, but this year operates there independently, while Bay Fish no longer maintains a Westport station.

With the opening of the trolling season on the Washington coast March 15 the boats out of Westport had very good fishing for so early in the year. The weather was favorable and the price ran well above 40c. A week later it was down to 40c or under, with weakening tendency as offerings increased.

## Crab Contract Attacked

Sequel to the 1954 spring sailing of the trawler **Deep Sea** for Bering Sea King crab grounds was a complaint of "unfair labor practices" brought against Wakefield's Deep Sea Trawlers, Inc., by Robert Cummings on behalf of Local 3, I.L.W.U., which had "missed the boat" when the **Deep Sea** signed a contract with the Crab and Codfish Workers Union, an affiliate of the Seafarers' International Union, A. F. of L.

Large majority of the crew is said to have expressed preference for Crab and Cod representation.

# What's the best gear for your boat?

Any experienced boat-owner can answer that question: the best gear for *any* boat is the gear that offers *greatest flexibility and ease of operation — runs smoother and quieter — and offers the longest, most trouble-free wear life.*

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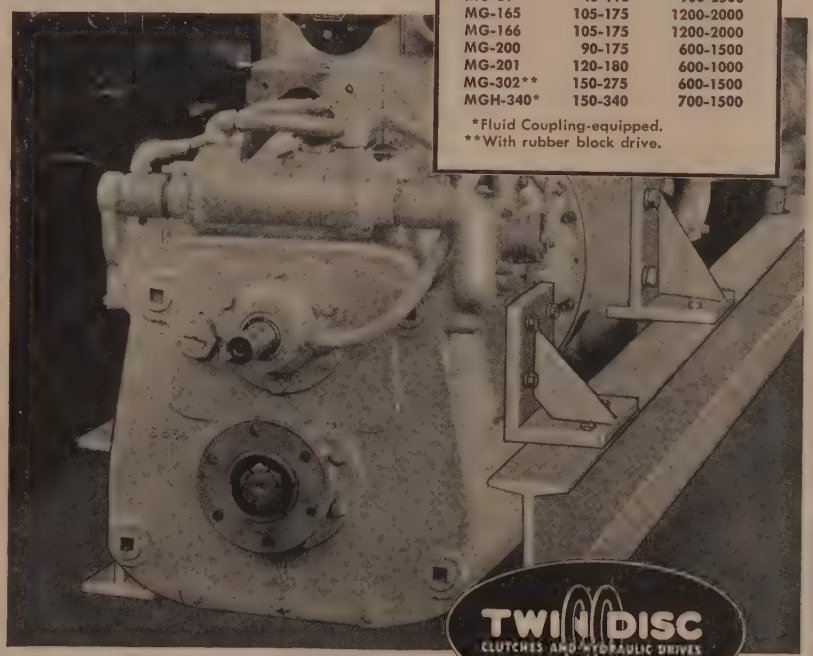
| MG-166 | 105-175 | 1200-2000 |
| MG-200 | 90-175 | 600-1500 |
| MG-201 | 120-180 | 600-1000 |
| MG-302** | 150-275 | 600-1500 |
| MGH-340* | 150-340 | 700-1500 |

*Fluid Coupling-equipped.
**With rubber block drive.

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**New, Improved UNOBA is made with high viscosity, 100% paraffin base oils...** the same oils which are used in Union's finest automotive and industrial oils. When combined with a highly effective oxidation inhibitor, this means greater resistance to hardening even under the severest conditions of friction, high temperature and extended lubrication intervals.

**New, Improved UNOBA is compounded with both barium and lithium soap bases...** the two finest known. This combination of high V.I., 100% paraffin base oils, oxidation inhibiting agent, and barium-lithium soaps means you get the finest industrial grease available at any price when you specify *New, Improved* UNOBA.

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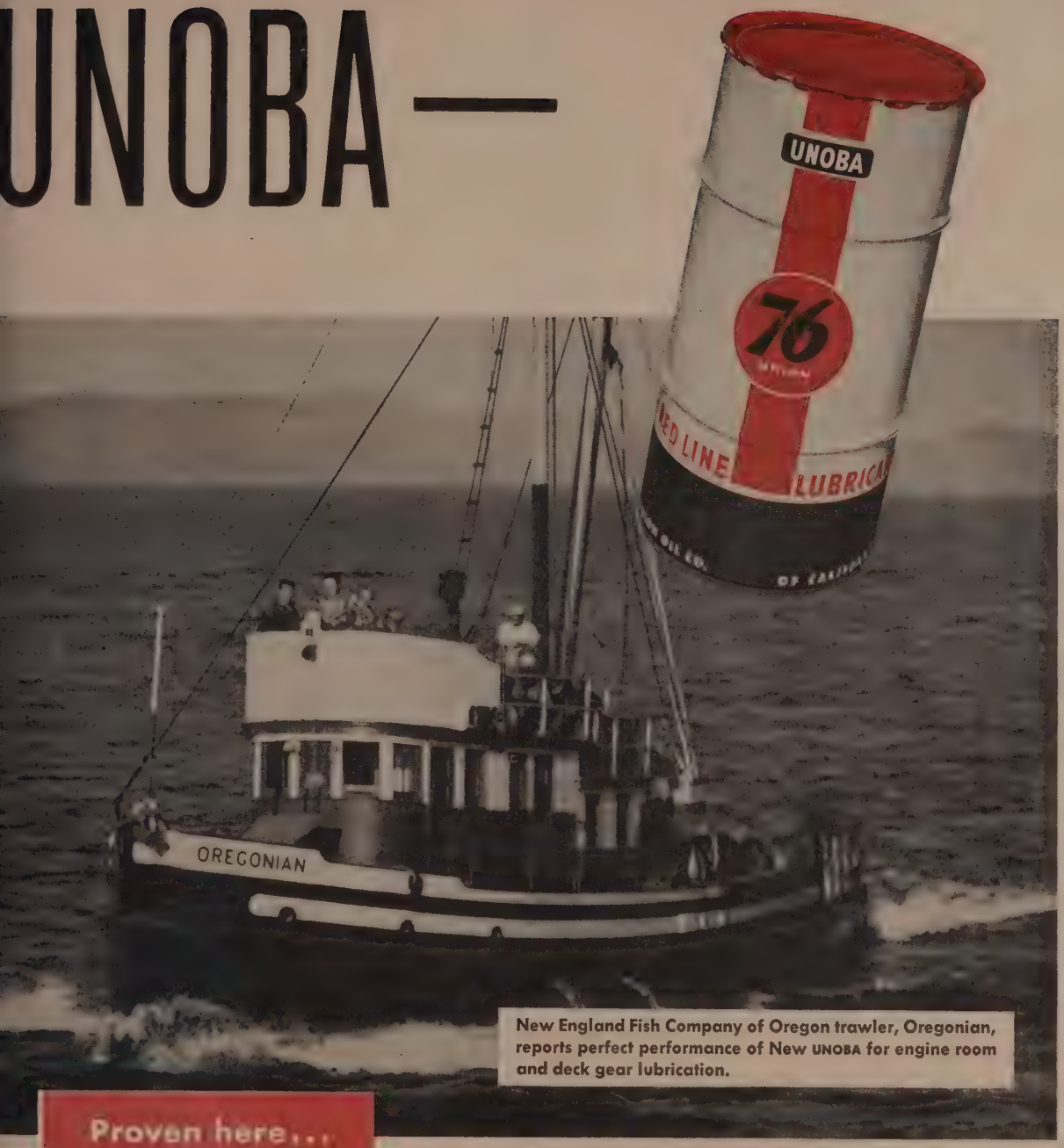


New England Fish Company of Oregon trawler, Oregonian, reports perfect performance of New UNOBA for engine room and deck gear lubrication.

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Greases, like the equipment they help keep rolling, are proven in the field. To secure conclusive evidence of its superiority, samples of *New, Improved* UNOBA were tested during the past two years in widely varying industrial applications... on almost every conceivable type of machinery and equipment. Results of these field and storage tests from California's Mojave Desert to the Alaskan Arctic... from logging camps in the Cascade Mountains to the Pacific fishing fleets... have more than satisfied Union's exacting product-development men.

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**Richard W. Joseph, owner of the *Antoinette B.***

# SAVES MONEY 2 WAYS WITH WOOLSEY "METALAST"®

Antoinette B. was built at National Steel and Shipbuilding Corp., San Diego. Woolsey "Metalast" System Paint supplied by Coast Equipment Co., San Diego.

Coast Equipment Co.
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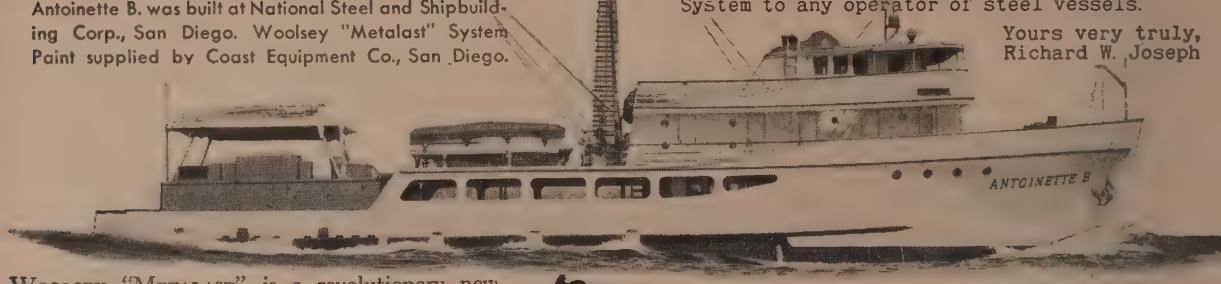
We have had such good results using Woolsey "Metalast" Coatings on the "Antoinette B." for the last two years that we wanted to write and tell you so.

We have never used any paints before on our steel hulls which have given such outstanding performance. Your "Metalast" Coatings have saved us money two ways — by preventing corrosion and by reducing cost and frequency of repainting.

We will gladly recommend your "Metalast" System to any operator of steel vessels.

Yours very truly,
Richard W. Joseph

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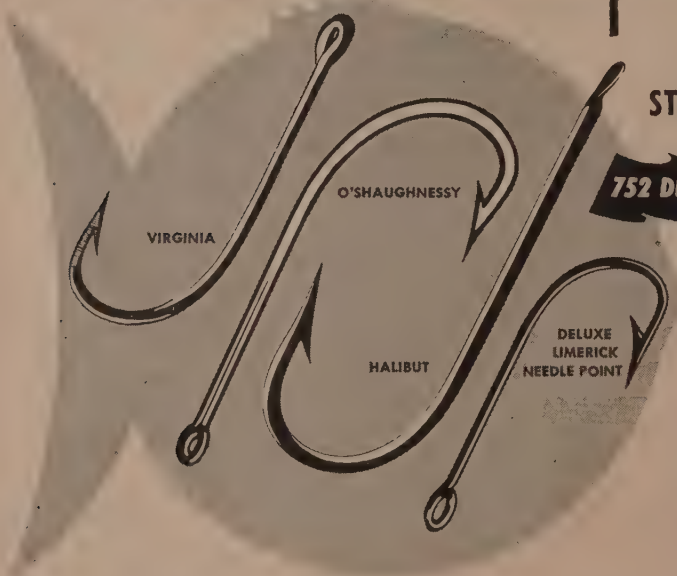


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**PFLUEGER** (Pronounced "FLEW-GER") MADE IN U.S.A.

A GREAT NAME IN TACKLE

# Canadian Fish Chief Drives For Pink Treaty, Equal Catch

Pink salmon constitute "the outstanding conservation problem" of the Pacific coast today, Hon. James Sinclair, Canada's Minister of Fisheries, told a meeting of British Columbia commercial fishermen in Vancouver this spring; and he went on to say "the obvious solution is an international commission, with equal division of the catch between Canada and the United States."

Mr. Sinclair then frankly advised the fishermen that the way to achieve such an international understanding was for them to go out and catch more of the Fraser River-Puget Sound Pink salmon than the Americans. He said: "Once we get the bulk of this run, I think we shall find, as with the Sockeye, that our American friends will realize the value of an international commission to conserve the fisheries, and divide the catch equally between the two nations."

(EDITORIAL COMMENT — Mr. Sinclair evidently was speaking of the Pink salmon entering the waters of Puget Sound and the Gulf of Georgia, and particularly those bound for the Fraser River, although previously his words seemed to indicate reference to the "coast" as a whole. Subsequently his wording tied his remarks rather closely to the Puget Sound-Gulf of Georgia fishery.)

As a contribution to a large Pink catch by Canadians, Mr. Sinclair promised that in the next Pink year Canadian gillnetters fishing outside the Strait of Juan de Fuca would be permitted to use nets as large as those legal in Puget Sound.

At the recent Bellingham meeting of the International Pacific Salmon Fisheries Commission, Chairman Thomas Reid, member of the Canadian Senate, said the commission is prepared to take over regulation and scientific study of Pinks as well as Sockeye whenever the governments of the two nations concerned provide for such action.

## Two Men Missing From Sunken Troller

Willard and Harold Tomkins, trollers, were missing from their 34' **Flora** when she was raised recently from the Columbia River off Fort Stevens.

Trolling poles sticking out of the water gave the clue to the sunken boat, which proved to be almost undamaged when raised. The boat apparently sank shortly after leaving Warrenton, Ore., for Depoe Bay with a load of crab pots.


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**Net and Line Preservative**

1. Easy to apply, no heating, dipping time—5 to 10 minutes. Quick to dry—6 to 12 hours.
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ALL OF WHICH ADD UP TO GREATER ECONOMY THRU' SAVINGS IN NETTING, TIME, AND MANPOWER.

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**for True-Course Automatic Steering**

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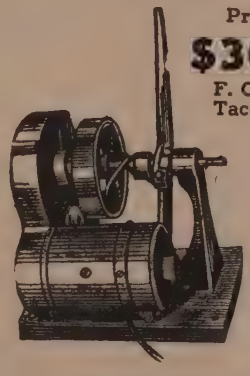

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GM DIESEL
CASE HISTORY No. 32-895

**BOAT AND OWNER:** 57-foot "Alaska limit" purse seiner "LAURIANNE" owned by Farwest Wrangell Company, Seattle, Washington.

**INSTALLATION:** General Motors "6-110" Marine Diesel replaced another Diesel engine. Swings 48" x 39" screw through 3.7 to 1 reduction.

**PERFORMANCE:** Company President A. R. Brueger (in the salmon industry 43 years) says, "Our experience with many GM Diesels caused us to specify the GM 6-110 for the 'LAURIANNE.' It's the ideal engine--we get maximum power in the engine space available." Switch to GM Diesel power gave 1.5-knot speed increase. Boat used for salmon fishing and as cannery tender.

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GENERAL MOTORS
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# *The choice of experience—*
# GM DIESEL POWER

Experienced fishermen from Maine all the way around to Alaska report that General Motors Marine Diesels cost less to run and less to maintain —give them more "net" profit no matter what the size of their catch. That's why you'll find fishing fleets standardizing on these smoother-running 2-cycle Diesel engines.

Like all GM Diesels, the "6-110" delivers more power from a smaller, lighter engine. It takes up less space in the hold, saves room for fish and fuel. Fast-accelerating 2-cycle operation means smoother, steadier, more responsive power. Clean, simple design speeds servicing, cuts maintenance costs. And when they're needed, parts cost less, too.

The "6-110" is also available in the new 409 continuous shaft horsepower "110 Tandem Twin"—two "6-110's" arranged in tandem and driving a single shaft. It's priced lower than other Diesels of comparable power—does more work at less cost. For complete details, ask your GM Marine Diesel distributor or write:

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Single Engines . . . 16 to 275 H.P. Multiple Units . . . Up to 840 H.P.

**Sales, Factory-Engineered Parts and Authorized Service through distributors and dealers in all important marine locations. SEE your local Telephone Classified Directory or write, wire or phone for name of nearest Distributor.**

**Bill Horner, skipper of the "American Venture," turned in a fine performance in March when he loaded his vessel with tuna in four days' fishing on the high seas off Peru.**

## Pacific Men and Boats Feature Diesel Booklet

Pacific fishermen will be interested in a recent Caterpillar publication entitled "Fishermen Must Fish," which deals with marine engines used by fishermen all over the world.

This eight-page booklet, complete with vivid photographs of Pacific fishing vessels, includes testimonials from fishermen whose livelihoods depend upon getting out to sea and back.

Copies of this booklet may be obtained from any Caterpillar marine dealers or from Caterpillar Tractor Co., Peoria, Illinois.

Pacific fishing vessels and fishermen pictured include: Arne Grotting's **Clara G.;** George Hamilton Jr.'s **Janice;** Emil Nilsen of the **Norrona;** Jack Ancich of the **Jackie A.;** Pete Piranio of the **Nina;** Frank Marsequerra of the **Marsequerra;** Olaf Westby of the **Princess;** and Vincent Buffa of the **Italia.**

## Reef Nets Attacked As Fixed Gear

A legal action aimed at reef nets was filed in the Washington state courts in April by Mike Pirak, Anacortes, who sought an injunction forbidding Washington Director of Fisheries Robert J. Schoettler from issuing licenses for reef nets.

Temporary injunction was issued restraining the issuance of new reef net licenses or the renewal of those which expired March 31.

Pirak's complaint charged that reef nets are fixed fishing appliances and as such are prohibited by Washington state law.

## Alaska Freezerships Load-up On Tuna In Tropical Waters

Two refrigerated tuna motherships unloaded their fare in March.

**Alaska Reefer** spent more than two weeks unloading a full capacity load of tuna, which was delivered to her by several purse seiners, including **Marsha Ann** and **Jackie Sue.**

Star-Kist Foods' Plant Four took the **Reefer's** tuna. Her owners include Andy Vilicich and his sons John and Steve, and Nick Jasprica and Tony Bulich, plus some Puget Sounders. Most of the fishing by the seiners delivering to the **Reefer** took place on the high seas about 9 degrees S.

**Toni B.** docked at San Diego and unloaded more than 600 tons of tuna at the Westlake-California Tuna Packing Co., whose vessels had delivered the tuna to the mothership while fishing the high seas off South America.

Both freezerships plan to head for Alaskan waters to participate in the Bristol Bay salmon season.

Captain Vilicich reported that some jigging was done for tuna by the small gillnet boats which the Reefer carried aboard into tropical waters. For the most part, however, the small boats were used at times to transport tuna from the purse seiners to the mothership.

* * *

The tuna clippers **Mary C. Canas** and **Pacific Queen** contributed heavily to tuna tonnage at San Diego during the last week in March.

"Plymouth's my line"

"... I use Plymouth Ship Brand Manila in my fishing operations, and find it does a good job. It works well, is easy to handle and, with proper care, lasts a long time. I am pleased to recommend it to other fishermen who are looking for a quality manila ..."

*(signed) John Overbo, Owner and Skipper, "Pacific," Seattle, Washington.*

Whether you fish in the Pacific, Atlantic, Gulf, or Great Lakes, there's a Plymouth rope engineered for your specific needs.

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PLYMOUTH Cordage Products

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## THE NEW

New 3-stage recordings and new stylus mechanism are outstanding features of the new low cost Bendix Model DR-10A Depth Recorder.

### 1. EXTENDED RANGE

A third position has been added to the range switch providing an additional scale for recordings up to 75 fathoms.

### 2. IMPROVED STYLUS MECHANISM

An easy-to-install stylus which is self-adjusting. Simple in design, extra long-lived and retaining the characteristic Bendix true-profile straight-line recording feature.

These important improvements, in addition to the other exclusive Bendix features—compactness, easy installation, low power drain, trouble-free service—all at no increase in price—demonstrate that you get more for your money with a Bendix.

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**Sturdy**

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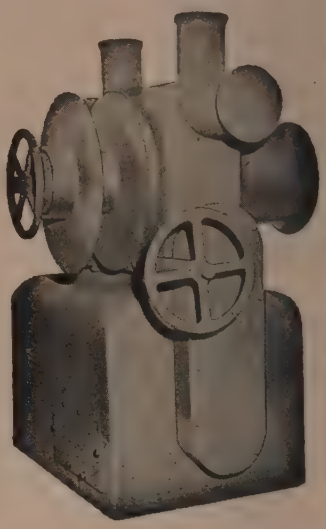
**LOW IN PRICE**

**A.C. or D.C.**

**10 hp.**



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**Wood and Steel Construction**

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# LINES and LEADERS

C. O. Friend H. E. Fellows

### Fellows and Friend Advance With Norberg Engines

Appointment of H. E. "Bud" Fellows, Jr. as Manager, Gasoline Marine Engine Department, is announced by Nordberg Manufacturing Company, Milwaukee.

Mr. Fellows succeeds Carl O. Friend, who has been named administrative manager of the firm's heavy machinery division. Among the duties in his new position, Mr. Friend will assume responsibility for the guidance of the Nordberg gasoline marine engine program.

Mr. Fellows joined Nordberg as sales and service engineer in the gasoline marine engine department in 1951 and shortly thereafter was named assistant sales manager. Assisting Mr. Fellows in his new position are Harry Griswold, sales engineer, and G "Pete" Hinze, service manager.

### Bendix Completes Marine Line With Fisher Buy

To its line of marine depth recorders and automatic pilots, which are in use around the world, Bendix has now added a complete line of marine radio equipment. The new equipment represents a complete line of products for every type of marine use, both pleasure and commercial.

Pacific Division of Bendix Aviation Corporation, North Hollywood, Calif., has purchased the radio products heretofore manufactured by Fisher Research Laboratories, Palo Alto. The line includes the famous "Skipper" series of radiotelephones, "Radio Pilot" Direction Finders, marine receivers and a complete line of transmitters from 30 to 200 watts in power.

Bendix will manufacture and sell these well known products under its own name and at the same time the Company will utilize its extensive research and engineering facilities to develop new products for the future.

Acquisition of the Fisher marine radio equipment makes Bendix one of the largest concerns in the marine electronic field.

**Two views in Nordby Supply's new store at Fishermen's Dock, Seattle. On the left, Darold Matheson and Jack Richardson are busy getting the stock of Pettit Paint on the shelves; while at the right Ward Turnbull, store manager, and Al Edwards beam their approval of the new set-up.**

**JAMES J. LOWE**

**Newly appointed sales manager of American Manufacturing Co., builders of American Brand rope. He has supervised the company's advertising and sales promotion activities since 1939.**

### 3 New Raytheon Dealers For Northern California

Three new Raytheon marine dealers in the northern California area have been appointed recently, according to E. J. Rome, district manager, Raytheon Mfg. Co., who makes his headquarters in San Francisco.

Bob Flowerman and Bob Gifford, Cal-Marine Radiophone Co., foot of Jones st., Fishermen's Wharf, San Francisco; Francis L. Auger, North Bay Electric Works, Inc., 535 Francisco blvd., San Rafael; and Clyde Kirlin, Electronics for Yachting, 300 Walnut ave., Walnut Creek, Calif., are the new dealers.

These concerns are now handling sales, service, and installation of Raytheon Fathometer depth indicators and recorders, radio telephones, portable radio direction finders, and gas monitors.

### Sudbury Vapor-Proof Switch

Sudbury Laboratory announces the manufacture of the new Sudbury vapor proof switch, designed to increase safety at sea.

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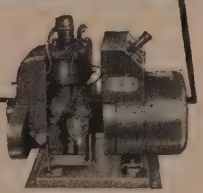

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1—LeRoy 220-volt, 30-kw. 3-phase generator set.
3—Kw power panels and other misc. electric equipment.
Stored at Inter Harbor Truck Co., 100 Broad Ave., Wilmington, Calif:
2—100-kw. generating sets, powered by Gen. Motors diesels, Models 3-268A (a.c. 220/440 volts each unit.)
1—Complete switchboard for the above two units (this comprises one complete set taken from LST vessel.)
8—Electric motor-driven centrifugal pumps, 230 volts, d.c.
1—Control box complete with switches, relays and cutouts (probably used in connection with power winch.)
Stored at Portland, Ore.:
4—50-hp. cargo winches with motors and control stands.
Stored at Martinolich Shipbuilding Co., 2475 East Belt St., San Diego 3, Calif.:
1—75-kw, 115 volt, d.c., 1200-rpm. generator mounted to 225-hp. super-charged Cummins engine.

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## Early Washington Trolling Better

First fortnight of 1954 salmon trolling off the Washington coast was marked with good fishing—for late March—with the catch running just about 25% above the same period of the year before.

Price **averaged** about 40c, although it was subject to some rather wide swings, dipping sharply before the end of the first week of fishing, but bouncing back toward the four-bit level about the end of the month.

Westport was the landing center for virtually the entire catch.

## Blackie Selvaggi Gets Balestrieri Eureka Post

D. L. Selvaggi, veteran figure in the Humboldt Bay commercial fishing industry for many years, has been named manager of the Eureka branch of the Jos. Balestrieri Company, heading up the firm's northern California operations. Selvaggi, familiarly known as "Blackie", has been plant foreman at the Tom Lazio plant for the last 12 years, and prior to that time was associated with other local companies.

Mr. Selvaggi relieves Ed Scudero, who had been in charge of the Balestrieri branch for the last year.

## Moss Landingmen Fish Shrimp Out of Texas

**Hermes II,** skippered by John Saarinen, with his sons, Art and Ed, and Don Woodward Jr., is seeking new fishing grounds far from Moss Landing, Calif. The boat and her crew recently arrived in Galveston, Texas, after a 27-day trip through the Canal and is now engaged in outfitting for shrimp fishing in the Gulf of Mexico.

* * *

Battista and Frank Bregante of Santa Cruz sold their Monterey type fishing boat, **Battisa B.** to Lawrence T. Mersereau of Belvedere. Mersereau, a representative of the American Rubber Co., will use the boat for fishing in the San Francisco bay area.

* * *

Rocco DiMaggio of Monterey purchased the **Louise B.** from John Bassano of Santa Cruz. The **Louise B.** was John's "little boat" before he purchased his big bait boat, **Lou Denny Wayne,** named after his three young sons.

* * *

Bill Bosworth of Seaside has purchased the **Sea Bird** from Robert Jex, of Venice. Bill is stripping the boat down to the hull and will make major alterations.

* * *

Curtt Olsen on the **Sonja** and Lloyd and Robert Myking on the **Ragnar M.** stopped briefly in Moss Landing on their way to Westport. A day or two out of port the boats ran into the worst storm of the year. Lloyd turned his boat back to Moss Landing and decided to give up the northern trip and wait for the May 1 opening of the salmon season.

* * *

Henry Duus' boat **Suud** (figure that name out!) was sold recently to Donald W. Miller who is just out of Navy service. Don will rename the boat **Marian** and do some fishing out of Moss Landing. Another boat recently changed hands when O. P. Callahan sold his **Santa Rita** to Charlton and Eva Beatty, of Watsonville. The Beattys have put in long hours getting the **Santa Rita** ready for the season.

## Veteran Monterey Seiner Off for Mexican Duty

The veteran purse seiner **Torrente Bros.,** ex-**Serra,** once beached, and once engulfed by flames, paid a visit to her home port at Monterey last month and then was on her way to Mexico.

The vessel, with her deckhouse and all superstructure burned away by a fire last September off the Golden Gate, has been purchased by Mexican interests through Bill Murphy, San Diego, and was skippered by him on her way "south of the border."

She took on a load of sardine processing machinery and a hopper from the Western Sardine Co. cannery in Monterey, which is being dismantled.

The 78' **Serra** or **Torrente Bros.** was built in 1930 as one of the first purse seiners in Monterey.

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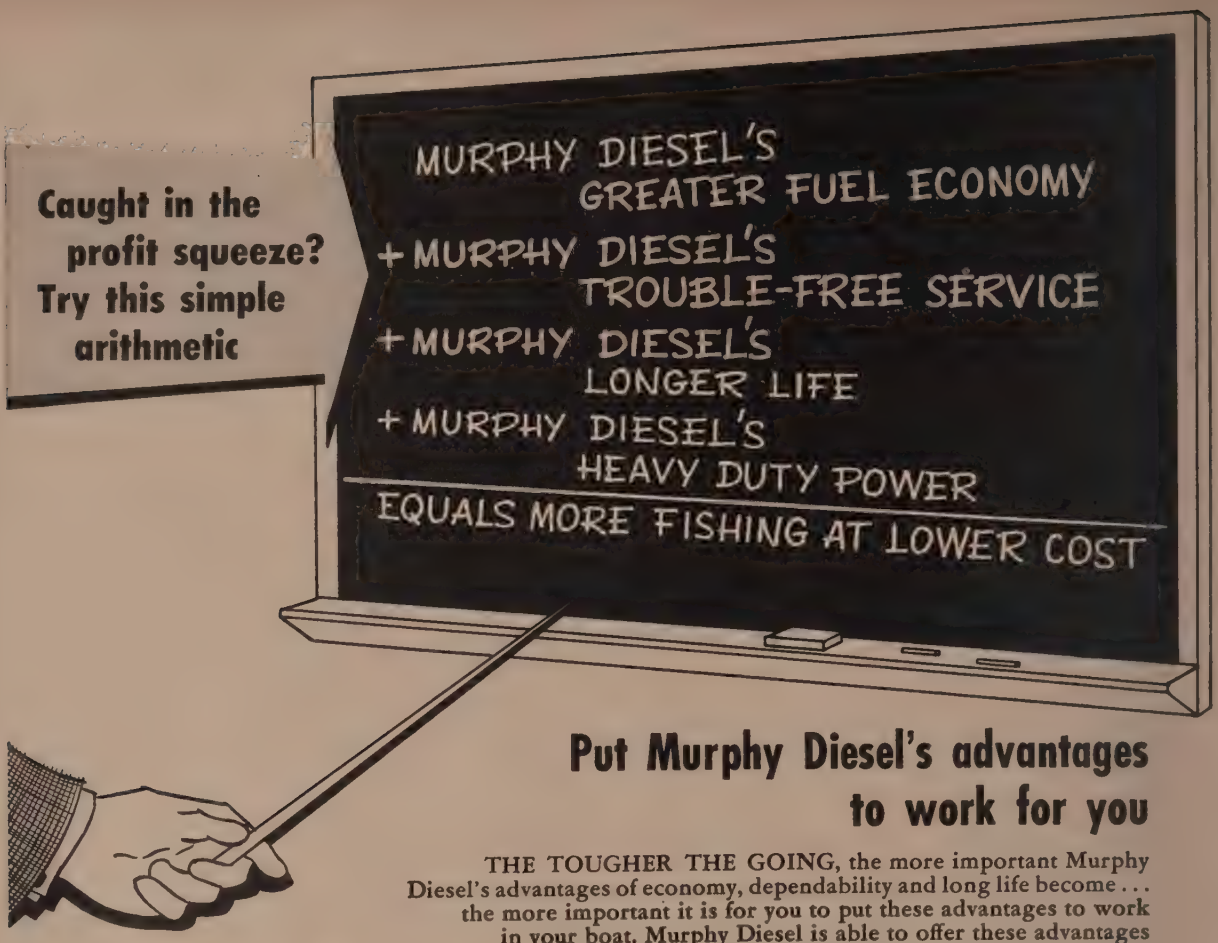


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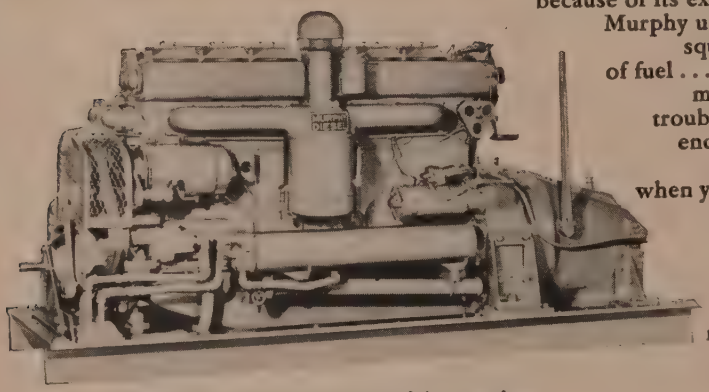

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155 Water Street

# WHAT HAS HAPPENED

# To the California Sardine?

By GEORGE J. CHRISTO
Secretary, San Francisco
Sardine Association

The California sardine fishery, once the largest fishery in the United States in terms of pounds, has almost disappeared. In the last two years the catches have dwindled down to 2,608 tons from the high peak in 1937 of 723,750 tons.

"Outdoor California," a monthly periodical put out by the Department of Fish and Game, carries an article in its January issue by Richard Croker, Chief of the Bureau of Marine Fisheries, wherein he attributes this catastrophic decline of the sardine fishery to over-exploitation by the industry and the failure of the industry to heed the warning of Mr. Croker's department.

We quote Mr. Croker's article in part: "The answer to these questions are complex, but we have them. The causes of scarcity can be summarized as: too much fishing and not enough reproduction."

The industry being conscious of the disappearance of the sardines, in 1948 voluntarily went to the California Legislature and asked for the passage of a law which taxed the industry at $1.00 per ton, and later $1.50 per ton, with the purpose of creating an oceanic research program which was headed by a committee that is known as the Marine Research Committee.

This committee in order to find the cause of the disappearance of the sardine engaged the following scientific research groups: California Academy of Sciences; California Department of Fish and Game; Hopkins Marine Station, Stanford University; U. S. Fish and Wildlife Service; University of California, Scripps Institution of Oceanography, in a cooperative effort.

Over three million dollars has been spent in this effort. Part of this came from appropriations by the California legislature and part from the Federal government, but the bulk of the expenditure was from the voluntary tax upon the industry.

The above mentioned distinguished scientific groups, now in their fourth year of investigations, state in part in their recently published report for the period of from July 1st, 1952 to June 30th, 1953 as follows: "The research studies on which these conclusions are based are outlined in this report. We are able to give some clues as to the causes of the catastrophic decline in sardine landings, but are not able to isolate any single primary reason. As the studies progress, it begins to seem more and more probable that it is a combination of several factors that have brought the sardine catch to its low level, and until we can identify and measure each of the important factors, no complete explanation can be given for this or a similar crisis which may overtake any of our marine fisheries."

The California Fish and Game Research Group is one of the above research agencies in this effort. Mr. Croker is the head of the California Fish and Game group and also the secretary of the Marine Research Committee. We presume that he, as secretary, must have had a hand in drafting the report; and if so, how can he differ so much with the Marine Research Report and with what he wrote in the "Outdoor California?"

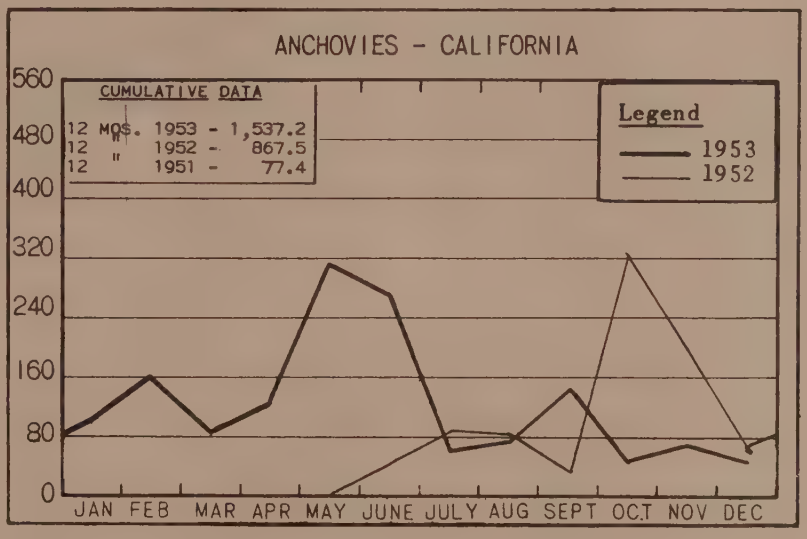
Mr. Croker's remarks in the "Outdoor California" were carried in summary by all the daily newspapers of the state, and were read by thousands of people who thus formed the idea that the men in the sardine industry are the worst exploiters in the world of a natural resource.

When the head of a department, such as Mr. Croker presides over, makes such public statements and publishes them, the people who are not familiar with the facts take his remarks for the gospel truth.

If he, as he claims in his article, has all the answers and is right, all of us should know that and disband our plants and our fishing fleets and look elsewhere for employment.

Fortunately, however, the distinguished scientific groups now engaged in finding the causes with their four years of labors do not agree with Mr. Croker. They say the

## MILLION-CASE NEWCOMER




Rocketing rise of California anchovy canning in the past two years is shown in thousands of cases in this graph from the U. S. Fish and Wildlife Service. Anchovy standard cases are reckoned on the basis of 48 cans containing 8 oz. net weight.

causes are many and they have not as yet been able to isolate any one in particular or to place the blame where it belongs.

The Chief of the Bureau of Marine Fisheries of California, Mr. Croker, has performed a disservice to the industry and to the honorable men in it, and has done much wrong to their credit.

Dr. John C. Marr, chief of South Pacific Fishery Investigations, a distinguished scientist in his field, connected with the U. S. Fish and Wildlife Service, has told us that the seals and sea lions must consume a minimum of 3.5 billion and 9.5 million pounds of fish respectively, annually. This exceeds the total commercial production of the region from the Bering Strait to the Galapagos Islands. The seal and sea lion herds have been increasing by leaps and bounds.

The whale population, also a heavy fish eater, off the California coast, has increased to where this year's census will exceed 1,000 whales according to Secretary of the Interior Douglas McKay.

A body rust on the sardine, a form of sickness, has attacked the fish in the last several years. Climatic changes, ocean current changes and many other things that happen out in the ocean that we know very little of have contributed to the disappearance of the sardine.

We know so very little, as yet, about the ocean, that for anyone to make such definite statements as Mr. Croker makes in his article is unfair.

The California sardine fishery is controlled by laws passed by the California legislature, which sets seasons for the catching of sardines for canning, and the Fish and Game Commission sets the limits on tonnage for reduction of sardines.

The seasons are from August 1 to January 15 in northern and central California and from October 1 to January 31 in southern California. Out of all those months a 90-day operation is a big operation, the balance of the season being lost due to the light of the moon, when no fishing is done, bad weather, etc. So the laws that govern the fishing in California are well carried out and the fishery is well protected.

It is not just, then, that what has happened to the sardine should be blamed on the industry.

What Mr. Croker has in mind is to arouse the populace in a way that the California legislature will give him power of life and death over the industry, for he proposes to close the fishing of sardines to commercial fishing for an indefinite period of years.

If he had the power to do that, how would he know when the fish will return or if there are any sardines out at sea. There will be no one fishing for them.

Dr. John C. Marr in correspondence to the writer states:

"From the standpoint of the **fish**, the only management which is of importance to the **fish** is that the population not be reduced to such a size that it can no longer reproduce itself as a species. I know of no marine fish which has suffered such a fate and doubt that the present laws of economics would ever make such possible.

"I have gone into this in some detail because you have asked what quantity of fish can be taken 'without the danger of over-exploitation,' without defining 'over-exploitation.' If by this you mean the reduction of a population to such a size that it cannot perpetuate itself, then, for the species involved, my opinion is that it would be impossible to bring about such a condition.

"The potentiality of a resource cannot be determined unless the resource is worked and exploited."

The sardine industry is one of the major industries of California. It brought into the State a new wealth every year of $60,000,000. It kept thousands of fishermen, cannery and allied workers employed. There are $100,000,000 invested in plants, boats and other facilities that make up the industry. All created and operated by progressive men who built these facilities with their hard labor and initiative. They are not sitting behind a desk. They are men that know how to foot payrolls and keep employment active. They are men that furnish the wherewithal that keeps the wheels of industry turning. These men certainly deserve better treatment than that accorded.

Of course everyone in the fish business knows that fisheries have disappeared before and have come back in greater strength than before. The menhaden fishery disappeared for a number of years and returned. The Norwegian herring fishery left for four years and in the last two years came back with greater strength, something like a million tons per season.

The Japanese sardine fishery, which was greater than ours, disappeared for seven years but returned the last season from one-third to ½ of normal.

Our fishery may yet surprise us one day soon.

# Low Ebb of California Sardines Boon to South Africa and Japan

Currently there are fewer sardines in California's coastal waters than ever noted before, and the population is not likely to increase in the next two years. This is the conclusion of the California Cooperative Oceanic Fishermens Investigation in its 1952-53 progress report. The agency is made up of five research agencies studying California's vanishing sardines.

The blow to California's fishermen and packers' prosperity is proving a boon to others. The Union of South Africa has discovered a rich export market and, for its west coast sardine and mackerel fishery, has switched emphasis from reduction to canning.

The Japanese, too, have been quick to take advantage of the slump in California's pilchard fishery, and last year exported to this country 8,277,826 lbs. canned in tomato sauce.

Last year, South Africa produced 1,500,000 cases of sardines; this year its group of packers expect to step up to 2,000,000 cases.

While no signs have appeared to give evidence of overfishing the resource, there was some slackening off in 1953, due it was believed to normal fluctuation in fish-schools. Steps are being taken to protect the fishery and institute conservation regulations.

These include: a four-months closed season, September through December; limitations contemplated on number of vessels permitted in the fishery, number of reduction plants and canneries, to be permitted.

The increase in sardine imports is shown in the following:

| | Lbs. 1953 | Lbs. 1952 |
|---|---|---|
| South Africa | 11,884,800 | ..... |
| Japan | 8,277,826 | ..... |
| Netherlands | 777,091 | 60 |
| United Kingdom | 85,166 | ..... |
| Norway | 708,411 | 60,986 |
| Canada | 407,345 | 369,295 |
| Other | 355,610 | 88,654 |
| | 22,496,249 | 518,995 |

Imports of sardines canned in oil did not show very much change from the previous year:

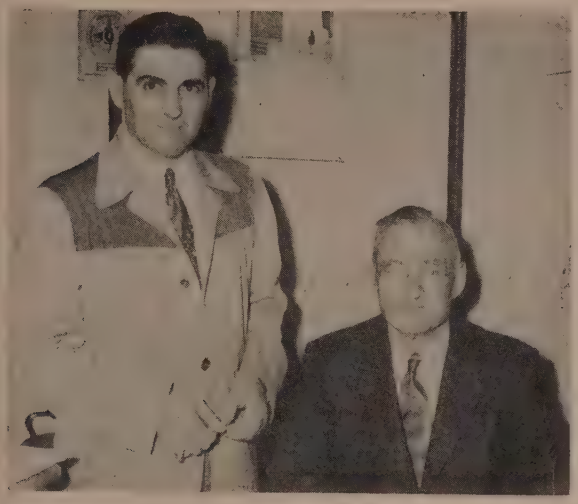
| | Lbs. 1953 | Lbs. 1952 |
|---|---|---|
| Norway | 14,333,310 | 12,267,082 |
| Portugal | 5,712,696 | 5,454,776 |
| Other | 2,412,356 | 2,623,281 |
| | 22,458,512 | 20,887,117 |

Final report of the 1953-54 season —August 1 through February 2— showed the California industry receiving 2,603 tons for canning; none for reduction under permit and 17 tons for pet food, etc., for a total of 2,620 tons. Produced were:

| | |
|---|---|
| 1-lb. ovals, 48s | 39,471 |
| 1-lb. talls, 48s | 22,369 |
| 8 oz. buffet, 96s | ..... |
| 8 oz. oblong, 48s | 743 |
| 5 oz. round, 100s | 679 |
| Total 1-lb. 48s equivalents | 62,957 |

Meal produced was 152 tons, and oil, 11,378 gals.

# Trend to Mildness Shifts Smokers to Frozen Salmon



William Oxenberg, head of Oxenberg Bros., Inc., famous New York smoked and cured fish firm, with his son, Bernard Oxenberg, the company's active general manager.

BASIC TREND in cured fish today is away from the strongly-salted items, with refrigeration rather than salt relied upon for preservation.

Evidence of this is written plain in the success of smokers and specialty packers in New York City and other metropolitan centers, which dominate the market for products of this type.

The implications of this for mild-curing are plain: less and less of the smoker's salmon comes out of the cask; and more and more of it comes out of the freezer.

While for many years metropolitan smokers have utilized some frozen salmon; and while this practice has always dominated in England, present proportion of the smoked salmon prepared from frozen is far greater than ever before—and growing.

Leverage producing this trend seems to come from two sources:

1. Growing preference of the consumer for the milder, less salty delicacy produced from frozen salmon;
2. Widely and readily available refrigeration facilities and a growing knowledge of the technology of freezing and storing and thawing.

### *Use of Frozen Widens Sources of Supply*

There are other factors involved. Where the smoker uses frozen salmon the variables are reduced to the quality of the fish itself. He is able to apply his own ideas and formulas.

Moreover, there are many more sources of supply; and the primary producer likes the new aspect of the business because it widens the market to which he can dispose of his frozen Kings and Silvers.

Perhaps there is also a matter of comparative costs between fish smoked from mild cure and from frozen stock — but smokers do not particularize in discussing matters of cost.

Another point of concern to Pacific salmon producers—trollers in particular — is the strong demand growing in the metropolitan markets for smoked Atlantic salmon. It is a big and growing factor. True, the supply is relatively limited, and the price is high — but the product is very good and the consumer demands it.

### *Broader Market Opened By New Developments*

Does all this mean that less salmon is being smoked? Not necessarily. It means, rather, that less mild cured salmon is being smoked, and that more and more of the market — probably a growing market — is being supplied from frozen stocks.

The evidence indicates that improved technology in curing and packing and refrigeration — plus many-fold multiplication of refrigerated cases in retail outlets — has produced a greater over-all volume of business. It has tended also to reduce the numbers of small, rule-of-thumb smokers and to build-up the bigger concerns with their modern technology in production and marketing as well, their name brands and advertising programs.

Smoked salmon is available in consumer packages of glass and tin in a thousand food stores for every one which carried it a few years ago. Every sandwich shop in the cities offers smoked salmon on its list, because today it is no longer necessary to carry in the case a whole side of smoked salmon, continually drying out, and requiring expert hand slicing. A 5-lb. can of sliced smoked salmon, protected in salad oil, is all the inventory needed, and provides a menu item of precisely known cost.

Einar Beyer, president of Northern Products Corporation, and one of the long-time, widely-known, widely-respected, supplier of cured salmon to the smokers of the metropolitan centers of the United States and Europe, pictured by "Pacific Fisherman" in his New York office in February.

### *The "Nova Scotia Cure"*

How does the smoking of frozen salmon differ from the method used with mild cured fish? Well, that is another thing into which the smokers do not go too definitely. Each house has particular practices which come under the heading of "trade secrets." Broadly speaking, however, the method is this:

The frozen salmon are thawed very slowly in barrels or tanks of cold water. They are then split, as for mild curing. (Atlantic salmon are often received frozen head-on, and in splitting the head also is split to provide the purchaser with positive

*fresh frozen*

**SALMON**

AND

**HALIBUT STEAKS FILLETS**

and now . . .

**SALMON HALIBUT and FISH**

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fresh frozen — breaded — ready to cook

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FOOT OF STACY STREET — SEATTLE

STEAKS FROM THE PACIFIC!

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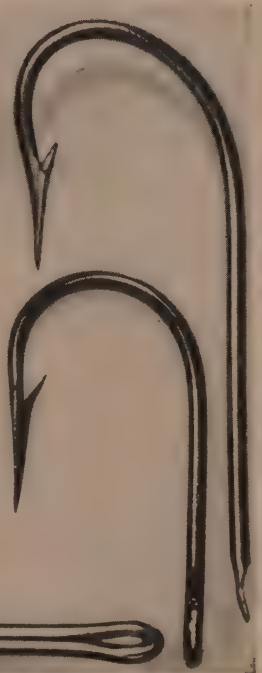

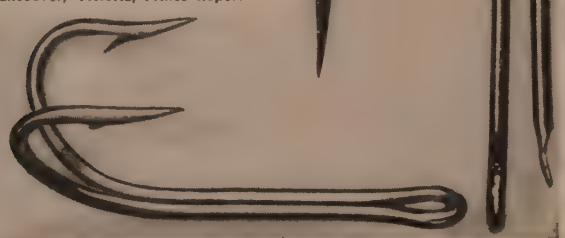

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..There's an Onan Electric Plant the right size and type for craft of every size and purpose . . . shrimpers, trawlers, tugs, workboats of all kinds. They speed work aboard and save time by permitting use of electrical equipment such as bilge pumps, compressors, radios, pressure-water systems and floodlights. Smooth-running and dependable; compact and easy to install. Standard equipment on many new craft. 400 to 10,000 watts, air cooled, A.C., battery charging and dual-purpose units.

**Model 5DRP**—Two-cylinder, air-cooled Diesel engine. 5,000 watts A.C.

*A Model to Fit Your Craft*

**Model 3DSP** 3,000 watts A.C. One-cylinder Diesel.

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AUTHORIZED DISTRIBUTORS

(Wash. & Alaska), **FREMONT ELECTRIC COMPANY**, 744 North 34th Seattle. (Oregon), **SPARKS-WILLS CO.**, 1624 S.E. Grand Ave., Portland, Oregon. (California & Nevada), **ETS-HOKIN & GALVAN**, 551 Mission St., San Francisco, Calif.; 218 N. Avalon Bldg., Wilmington, Calif.

Onan ELECTRIC PLANTS

proof of the origin of the fish. This of course is only in the case of salmon designed for sale as whole sides.)

The sides are sprinkled with a curing mixture whose composition varies with the house, but which usually contains some sugar as well as salt. Function of this step is seasoning rather than preservation. After being seasoned for a time, during which the sides have yielded up a moderate amount of brine, they are smoked in two-story "ovens," with the salmon high above the fire. In New York gas burners are used for a quick heat to start the oil from the fish and give them a glossy surface. The charcoal pots with oak chips are introduced briefly for a whiff of smoke.

Aaron Gilman of Vita Food Products, Inc., left, and Henry H. Goodrich, New York City vice president of the New England Fish Co., beside the modern, model stainless steel packing line where deft women pack Vita's sliced smoked salmon in tins for its nation-wide trade.

### *Electrostatic Smoking Enters*

In smoking salmon which has been frozen and not salted, it is usually the practice to lay the sides on screens rather than to hang them from hooks, because the flesh is softer and the skin tender.

In Los Angeles the Louis Vitale's Los Angeles Smoking & Curing Co., which uses only frozen salmon for smoking, uses an electrostatic smoker in which the sides are carried through a tunnel and the smoke is deposited on the fish as result of opposite electric polarity.

In New York the extremely mild smoking which is given much of the salmon—Pacific as well as Atlantic species—is generally called the "Nova Scotia cure," even where applied to Pacific salmon.

### *Packaging Makes Strides*

While the "jobbers" with their trucks and push carts still distribute much smoked salmon in the metropolitan centers of the East, more and more of the production is sliced and packaged for the consumer and the delicatessen or sandwich shop.

Vita Food Products, Inc., has a double packing line in its fine Brooklyn plant. From the slicing machines, neat piles of sliced are conveyed along two stainless steel lines where women deftly fill the cans, top them with salad oil to exclude air and protect the fish from oxidizing, and then send them to the closing machine. Cans for Atlantic salmon are lithographed in blue; for Pacific salmon, red.

### *The Trend in Herring*

The swing toward lightly cured smoked salmon, put up in packages for restaurant use or consumer sale is reflected directly in the case of herring and herring products. Bernard Oxenberg of Oxenberg Brothers, Inc., and their subsidiary Delca specialty house particularly emphasize the strong trend away from salt herring in a barrel and toward prepared herring specialties of many sorts and styles. He believes that modern interest in a low-sodium diet has much to do with the drift, supplemented of course by the new generation's interest in convenience and the phenomenal growth of refrigerated cases in all manner of food stores.

Hotel and restaurant supply is an outlet of decided importance in today's herring trade. On most good menus you will find bismarck, marinade, sour cream, wine sauce and other herring specialties among the appetizers.

Is America's herring consumption shrinking, as it seemed to be a few years ago. Not so, in the view of those in best position to know. Less and less herring is sold dripping brine from a barrel; and more and more mildly prepared and attractively packaged.

From where does most of the herring for specialty packing come? From Nova Scotia and Newfoundland; from Iceland, Norway and Scotland.

Does any come from Alaska? Not a fish.

## Weissich Fish Sticks Occupy Three Shifts

Theo Weissich Fish Co., Eureka, recently has been operating three shifts, 22 hours per day, to meet demands for frozen, packaged seafood products, according to Theo Weissich, president and general manager.

Accounting in large measure for the winter demand was a new product called the "Heat 'n Eat" French fried fish stick package, introduced only last January. Production has been running to 500 cases daily, with an anticipated 750 cases per day in the near future. Weissich has been using considerable sole purchased from Washington points, although the sticks originally were made from halibut. Most of the output is being distributed in the southern California market.

Mr. Weissich also disclosed plans for an entirely new frozen seafood product in the form of a complete "shore dinner", to include fish and vegetables and other dinner plate "trimmings", and has plans also for a "fish and chips" dinner, including packaged frozen fish and potato chips, ready for quick cooking.

Mr. Weissich stated that the projected products are only in the planning stage at present, and that the idea stems from the frozen chicken and turkeys dinners now on the frozen food market. Commenting on the company's exploitation of the frozen food field he said:

"In order to fight foreign imports of bottom fish, we set up an operation where we could appeal to the homemaker to put a real fish dinner on the table with the least possible effort".

## Bell St. Keeps Cool

The Port of Seattle this spring shelved its plans for discontinuing operation of its cold storage plant at the Bell Street Terminal, long the service center for much of the Puget Sound cured fish business.

Closure of the storage was protested vigorously by fishery operators, who gave the responsibility for their case into the hands of a committee composed of Robert Dignon, Northern Products Corporation; George Burchard, Washington Laboratories; Gordon Davis, Oxenberg Bros.; and John McCallum, McCallum-Legaz Fish Co.

The committee's effectiveness is reflected in the decision of the port commission to substitute operating economies for closure of the cold storage.

## John Buchanan Named On Financial Board

John M. Buchanan, president of B. C. Packers, Ltd., Vancouver, has been oppointed as a member of the advisory board of Huron & Erie Mortgage Corporation and the Canada Trust Co.

# U. S. SEAPLANES CARRY DANFORTH *Hi-Tensile* ANCHORS

Convair's R3Y Tradewind is the fastest cargo-transport flying boats ever built...she speeds along at better than 350 MPH. Wingspan is about 145 feet.

The Grumman SA-16 is a triple-threat Air Rescue aircraft which allows the pilot to "air-select" the correct gear for landing on land, water, snow or ice.

One of the Navy's deadliest anti-submarine weapons is the Martin P5M-1 Marlin, powered by two Wright turbo-compound engines of 3250 HP each.

Our various air commands, too, recognize one basic fact about anchors: *there is more security in every pound of Danforth anchor than in any other anchor made.* That is another way of saying that a Danforth anchor will hold more, pound for pound, than any other anchor. Why not equip *your own boat* with safe, easy-to-handle Danforth anchors—now. All good marine dealers have them in stock.

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**A Continuously Constructive Force in the Salmon Industry . . .**

# OCEANIC SALES COMPANY

**3302 Smith Tower**

**SEATTLE 4, WASH.**

# CANNED SALMON

**Cable Address:**
**"NAECO" All Codes**

FOOD FISH MARKETING

Section of PACIFIC FISHERMAN--

*News and Views of National Trade in Fish and Shellfish*

May 1954

# "A Healthy Market"— So "They" Say of Salmon

Short supply of salmon, priced low in relation to other directly competing foods, and with a surprisingly effective promotional campaign behind it, had produced a healthy situation in salmon marketing by the time the first tenders faded out of sight to Westward this spring.

This according to the virtually unanimous testimony of brokers and salmon distributors generally—some of them just returned from long trips through the territory.

Nevertheless, they saw no reason to expect higher prices for the coming season's pack; and felt that any substantial advance would again react adversely upon the movement of the product.

Salmon takes part of its recent gains in shelf space and dealer interest from the higher pricing of tuna. The Lenten promotional campaign has provided leverage beyond the hopes of its sponsors. The cold statistics proved pack deficiency to the trade last fall, with a result which J. E. Salmon, president of Oceanic Sales Co., describes in these words:

"Not in many years has there been so much off-season activity as the trade has seen since last October. At a time when the trade usually feels only turkey and Christmas goods can be sold, this year we have been selling salmon.

"True enough, the prices have been at bargain levels in comparison with competing foods; and practically all Alaska packers suffered losses because of the small size and crushing cost of 1953 production.

"The fact does remain, however, that the promotion campaign has been **very** effective; and that the available stocks of salmon are about cleaned up."

April was a month of movement in the primary salmon market, with the April 30 tax date lending special incentive to getting the goods on the road where prior orders had been placed. At presstime, about the middle of the month, there was still a substantial quantity of salmon in Seattle warehouses, but most of it was earmarked for specific purchasers, and distributors declared that May Day would find precious little of it lingering.

Although visible stocks of Reds were still to be found early in April, there was no reason to doubt the vigorous declaration of sales departments and primary distributors that virtually all, save perhaps a few halves, was accounted for by firm commitments.

What few Pinks—and they were **few**—remained available were very firm at $19 or better for first quality. Some kept coming from Canada, but they had been purchased earlier, probably before the British made their bid.

Chum talls were off the market, save for spring-packed supplies available in a very limited way at $16.

## "Tuna Aloha" Program Offers Hawaii Trip

Star-Kist Foods Inc., which sponsors a section of Arthur Godfrey Time on television and radio, is offering through the program trips to Hawaii in a contest involving a special tuna recipe, Star-Kist Tuna Aloha.

The recipe is this: 2 cups cooked rice, Star-Kist Tuna, seasoning, parsley, onion juice, Cheddar cheese, white sauce, pineapple, bread crumbs, brown sugar. The mixture is oven-cooked.

## South African Mackerel Cost at U.S. Ports

In the March issue PACIFIC FISHERMAN stated imports of canned mackerel, in 48 1-lb. tall cans from South Africa canneries was being laid down at any U.S. port of entry at a reported price of $6.00 to $6.30 per case.

This was in error. The quotation should have been fob. Capetown. As of April 1, quotations at Capetown were around $6.20, with freight and insurance, 73c; import duty 75c and miscellaneous charges another 20c, bringing the canned product, laid down, to $7.88 per case; to which must be added importing canners' and brokers' profits.

## Canned Tuna Demand Normal-or-Better

Canned tuna sales over the national territory apparently were showing no ill effects from the H-bomb scare, brokers reporting canned tuna moving normally; in fact, one sales manager declared buying was intensified from March and early April, 1953.

West Coast packers still considered it too early, because Lent was still in progress, to tell if the new scale of wholesale prices, reflected in increased retail costs per can, was having any adverse effect.

While the increase of wholesale quotations was general, it was reported in various parts of the country that some "deals" were being made. Naturally, after January and February's heavy buying, there would be some lull in March and probably into April.

Canned stocks in packers' hands were low, hovering around 1,000,000 cases. March production, while ahead of 1953, was down compared to January and February, and this included imports. The total produced by Southern California did not exceed 450,000 cases, packed from a delivered 10,000 tons of domestic and imported raw fish.

## Harry Irving Moves

H. A. Irving Co. has moved into new and handsome offices at 64 Pine St., San Francisco, after being on California street for seven years.

The telephone remains the same: GArfield 1-4814.

R. J. Ryman, secretary-treasurer, Carmel Canning Co., Monterey, who formerly had offices with H. A. Irving Co., now makes his headquarters in Palo Alto.

## Seattle Market

Prices openly quoted at Seattle at presstime, this issue, basis per case of 48 cans, fob. terminals, Pacific Coast.

| Salmon— | Per Case |
|---|---|
| Alaska Reds, 1/tall | $27-28 |
| Alaska Red, ½/48 | 17-18 |
| Red (frozen) 1/t | 26 |
| Red (frozen) ½/48 | 16 |
| King 1/tall | 24 |
| King ½/48 | 15 |
| Coho 1/tall | 20-21 |
| Coho ½/48 | 12-12.50 |
| Pink 1/tall | 19 |
| Pink ½/48 | 10.50-11 |
| Chum 1/tall | 16 |
| Chum ½/48 | 9 |
| Sockeye, Puget, mf ½s | 17.50 |
| Sockeye, Puget, ½s | 10.50 |
| Crab—(basis 2 doz. per case) | |
| Alaska King, ½/24 | 16 |
| Dungeness, ½/24 | 13 |

# What's the Duty on Sticks?

Tariff status of semi-prepared fish sticks, or of blocks of fish ready to be cut into sticks, breaded and fried, is one of the really hot subjects in the fish markets and customs houses of the United States this spring.

From many sources imported frozen blocks of fish are being offered; while other overseas suppliers are offering frozen fish sticks, already breaded. Some of these sticks are offered frozen raw and others cooked—but in the manner of cooking lies one of the controversies.

At time of writing it appeared **probable** that frozen fish sticks, breaded, but not cooked, are dutiable at 1c per lb. under Tariff Paragraph 720(b) which provided that duty for "fish, prepared or preserved, not otherwise provided for."

On the other hand, frozen blocks of fish ready for cutting into steaks generally are considered to be fillets, although not frozen separately, and thus to take the fillet duty, which is 1⅞ or 2½c per lb., depending upon whether received before the quota is filled.

The critical point in the argument seems to lie in whether or not the act of cutting a block of frozen fillets into sticks, and then breading them, takes them out of the fillet category and puts them into the "not otherwise provided for" basket.

Cooked fish sticks are something else again. The Boston collector of customs has ruled that fish sticks which have been fried in oil come under the 30% ad valorem duty on "fish, prepared or preserved in any manner, if packed in oil, or in oil and other substances."

He thinks that cooking breaded fillets in oil brings them under the category of being packed in oil and other substances.

Chef Milani, famous television chef, now brings the Ocean Garden Shrimp story to his Southern California viewers every week via KCOP, Los Angeles. In this photo Chef Milani displays a package of Ocean Garden shrimp to his sidekick Lou Marcelle. Packed by Marine Products Company, San Diego, Ocean Garden Frozen Shrimp is available through these sales representatives: Elliott W. Hudgins Company, Baltimore; Stanley J. Remus & Co., Chicago; Reinke and Amende in Los Angeles and San Francisco; Don Elggren and Co., Salt Lake City; Hutchins Brokerage Co., Minneapolis; Wilbur-Ellis Co., New York; Marine Specialty Food Products Co., Portland; W. J. Hasselman, Pittsburgh; Ivar Wendt, Seattle; and Brown-Weidman Brokerage Co., Denver.

## Substantial British Salmon Import Permits Expected

Permits for importation of several million dollars worth of British Columbia canned salmon may be issued in the United Kingdom later this year, according to representatives of British buying groups. One estimate ran as high as $10,000,000, but packers expressed doubt as to whether such an order could be filled without committing a substantial proportion of the 1954 salmon pack to the overseas market.

"Nothing is certain in this business," one of the United Kingdom representatives, who preferred anonymity, told **Pacific Fisherman.** "But the release of canned salmon from government controls except to the limit of dollar permits should result in more orders being placed through trade channels. The United Kingdom cannot expect to obtain large supplies from the United States so long as the Alaska pack is light and in the face of the huge domestic consumption."

* * *

**Boyd-Collins Co.,** San Francisco sea food brokers, have been appointed northern California brokers for the fresh and frozen fish, frozen fillets, vacuum packed crab meat and other items produced by the Tom Lazio Fish Co., Eureka, Calif.

largest line of seafoods under one packer's label
Bumble Bee
quality keeps customers sold
COLUMBIA RIVER PACKERS ASSN., Inc.
Astoria, Oregon

ALASKA PINK
PINK BEAUTY SALMON
"Packed with the Wiggle in its tail"
NEW ENGLAND FISH CO.
Seattle, Wash.
Since 1868
Producers • Packers • Distributors
Canned • Fresh • Frozen • Seafoods

# Utmost in Safeguards
## Raised Against Radio-activity

Industry and government alike — and in concert — moved effectively this spring to safeguard the consuming public against any possibility of receiving radio-active tuna as result of the hydrogen bomb tests conducted in mid-Pacific proving grounds by the Atomic Energy Commission.

Systematic search, which spared no effort and employed painstaking and scientific testing of tuna with Geiger counters, revealed no radio-active tuna whatever beyond that carried by the Japanese fishing boat **Fukuryu Maru,** which was close enough to see the flash of the explosion and to be contaminated a few hours later by its products.

The boat was fishing at the time, with its catch on deck and hatches open. Subsequent examination of the 18 tons of mixed Yellowfin and shark —no Albacore—which was landed in Japan March 14 showed it to be radio-active. The fish had been sold in the fresh fish markets of Tokyo and Osaka. None of it went to canneries or was exported frozen.

No such contamination was found in the catches of other Japanese fishing vessels further from the explosion; nor was there any evidence to indicate that live fish in the sea were or could be so contaminated.

Before the end of March the U. S. Food and Drug Administration initiated a rigid system of inspection at all ports where imported tuna were being discharged. Beside California ports, tuna was examined at Astoria, Hoquiam, Tacoma and Seattle.

The Canadian government also imposed similar safeguards on imported tuna being discharged in British Columbia.

First attention of course was given to deliveries of frozen tuna; but careful inspection also was made of canned tuna imports. At presstime there had been no report from the Food and Drug Administration of any instance in which any radio-activity had been detected in fish, either frozen or canned.

Geiger counters by the score were employed in the inspections, which imposed a heavy load on the already-slender staffs of the Food and Drug Administration offices on the Pacific Coast.

Cognizant of the fact that a "bad press" had attended the entire incident of the injury of the Japanese fishermen and the contamination of their catch, industry leaders and government officers alike spared no effort or cost to be certain that there be no further adverse effects.

## B. T. Weyand Sells Brokerage Business

B. T. Weyand, who for 20 years has been an active figure in the salmon marketing business, and before that in the operating end of the industry, this spring sold his business, Weyand & Co. to G. Lee Risbell, who will conduct it from his offices at 702 Northern Life Tower, Seattle.

Mr. Weyand said that he planned to "sit-by for awhile".

He entered the salmon business in the operating end with the Alaska Salmon Co. under the late C. P. Hale; subsequently joined R. E. Cotter Co., one of the widely known brokerage houses; and then managed the Seattle office of the Griffith-Durney Co. for a number of years. He eventually acquired the Seattle end of the business and changed the name to Weyand & Co.

## "Honey Boy" Dinner Merchandising Extended

Intensive consumer advertising on Honey Boy Dinner of macaroni, salmon and peas in five metropolitan areas starting in April has been announced by Dehn & Company, Inc., Seattle, sales agents for Marine Foods Packing Company, Seattle, manufacturers of this new hot-or-cold, ready-to-serve canned food product.

Heavy eight-week schedules employing newspapers, radio and television have been set up for the five markets which are: Dallas, Fort Worth, Houston, eastern Nebraska, and eastern Iowa.

## Southern California Canned Fish Prices

Quoted F.O.B. Western Terminals at Presstime

| | |
|---|---|
| **TUNA—** | |
| Advertised Brands: | |
| White Meat, Fancy | $16.50-$17.50 |
| Light Meat, Chunks | $14.25-$14.75 |
| Light Meat, Fancy | $16.50-$16.75 |
| Light Meat, Chunks | $15.25-$14.75 |
| Grated | $10.50-$10.75 |
| Private Label: | |
| White Meat, Fancy | $15.00-$16.00 |
| White Meat, Chunks | $13.50-$14.00 |
| Light Meat, Fancy | $14.50-$15.00 |
| Light Meat, Chunks | $13.00-$13.50 |
| Grated | $10.00-$10.25 |
| **MACKEREL—** | |
| Pacific, tall, 48s | $9.00 |
| Jack, tall, 48s | $8.50 |
| **ANCHOVIES—** | |
| T/s, 5 oz., 100s | $6.75-$7.75 |
| T/s, 1 lb., ovals, 48s | $7.50-$7.60 |

PACIFIC PEARL

Crab, Salmon, Clams
Tuna and Oysters
IVAR
WENDT
Exclusive Sales Agents
701 Central Bldg., Seattle 4, Wash.
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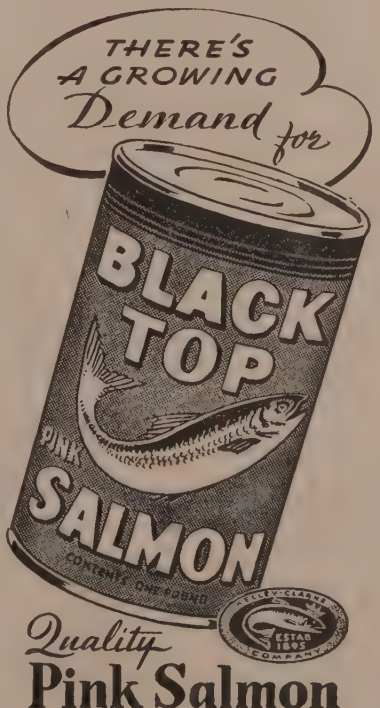


Quality
Pink Salmon
KELLEY-CLARKE CO.
2460 6th Ave. S.
Seattle 4, Washington

# "A Lot for the Money"

The headline of this item is the universal verdict of salmon sellers as they sat back at the end of Lent and surveyed the results of the 1954 Spring promotion program of Canned Salmon, Inc.

Salmon brokers and sales managers don't often agree on a lot of things, but here was one where no note of dissent, and no minority report filed.

Not only did the brokers think that the industry got a lot for its money; but they agreed also that the promotion and the merchandising effort which went with it won the attention, interest and support of the grocery trade and—in short—sold a lot of salmon to a lot of people who had hardly heard about salmon, or had almost forgotten how good it could be, how economical and how nutritious it is, how many ways it fits into the menu, and how there's a kind for every use and a variety priced for every purse.

Lenten food pages and magazine sections of newspapers throughout the country featured canned salmon dishes for literally millions of readers; and tie-in and related-item advertising appeared in leading magazines.

An example of one of the latter—to appear in LIFE May 17, is reproduced in the American Can Co. advertisement in this issue of **Pacific Fisherman**, which features "West Coast Sea Food Supper," built around clam nectar, canned salmon and/or canned tuna.

One salmon seller, a man of perhaps better-than-average perception, put it this way:

"There's a measurable reversal in the attitude of the food store operator or manager toward canned salmon this spring. They are **interested** in it; and this is reflected in more shelf space, on better shelves; in food page advertising; in floor displays. We no longer hear the formerly ever-recurrent price complaint. This spring the attitude of the grocer seems to be that salmon is **worth** the price."

## Mexican Spring Shrimp Output Is Satisfactory

The Mexican Pacific shrimp fishery was continuing to yield well as spring advanced. In March slightly less than 2,000,000 lbs. crossed the international borders of Arizona and California. Wholesale prices, west coast, remained satisfactorily high, with under-15 quoted at 90c per lb., a little under March, 1953, for top quality, layer pack, brand names.

Shipments of white shrimp, mostly from the Salina Cruz area, were arriving in Southern California, offsetting somewhat the previously heavy arrivals of the brown variety.

A closed season was declared by the Mexican government along certain parts of the west coast, April 16 to August 31, this extending the period as much as a month in some districts.

## H. W. Daggatt Retires

H. W. Daggatt, for the past nine years Pacific Coast manager of Steinhardter & Nordlinger, New York food brokers, announces his retirement from the food brokerage business, and also the appointment of R. J. McHenry as the new manager at San Francisco. Mr. McHenry has been assistant to Mr. Daggatt for the past seven years and is well known to the trade.

## New Fish Sales Firm

M. McCallum, formerly sales manager of the Fishermen's Co-operative Federation at Vancouver, B. C., has resigned to open his own business, McCallum Sales, Ltd., specializing in canned salmon and crab, fresh and frozen salmon and halibut, with offices in the building formerly occupied by J. H. Todd & Sons, Commissioner Street, Vancouver. He is catering to the domestic and export markets.

## "Carnation" Creamed Tuna Joins "Dinner" Group

Carnation Creamed Tuna, a new heat-and-serve dinner, is being enthusiastically received by the consumer wherever it is introduced, according to the packer, California Marine Curing & Packing Co.

Carnation Creamed Tuna is packed in a 15-ounce tall can with a red and white label. Each can contains a generous amount of tuna chunks in a rich cream sauce. It is claimed to be superior in quality to creamed tuna prepared in the average home.

This new kind of tuna product is being introduced nationally through local newspapers. Ads will feature the time and work saving features of the product, along with its high quality and low cost.

Carnation Creamed Tuna is packed by one of California's largest tuna packers, canners of Priority Brand. It is represented nationally by J. R. Barry Company, Terminal Island. Max Gorby, president of the cannery, points out the product was developed with the cooperation of Durney, Inc., licensee of the Carnation Company.

Easy to Remember! Easier to Sell!
J. R. BARRY & CO.
338 Cannery St., P.O. Box 126 TErminal 2-6488
*Exclusive Sales Agents For*
CALIFORNIA MARINE CURING & PACKING Co.
*Tuna — Sardines — Mackerel*

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CANNED and FROZEN FISH
National and Local Sales Representatives
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WESTGATE-CALIFORNIA TUNA PACKING CO.
28th Street and Harbor Dr. San Diego, Calif.

# FISH STIX Their Promise and Pitfalls

FISH STICKS are Topic No. 1 in the packaged frozen fish trade of the United States today, and they are soaking up supplies of the often-hard-to-sell items in New England and the Maritime Provinces of Canada like lutefisk soaks up water. Where are the cod fillets which a year ago were a drug on the market, with a million pounds and more selling at 11c per lb., packaged, in the spring of 1953? Gone into fish sticks.

And where do the fish sticks go? To many, many homes — that much is sure. They are in every frozen food cabinet in the East, and the store managers testify to their movement, testimony verified by the remarkable amount of space given to sticks. This space exceeds that of any other ready-cooked fish item, and may equal that allowed for frozen fillets.

Will it all last? Will sticks' popularity stick? Everyone in the business wants to know, and everyone has a stake in the answer.

### *Quality Holds Key*

Most thoughtful students of the fish sticks phenomenon are inclined to believe:

1. Long-range success will require consistent quality, and this can come only if the industry persistently polices itself against offerings of inferior quality — which have already begun to appear;

2. Counting quality as well-maintained, popularity will tend to level-off at a reasonably high level, limited largely to the tables of women who work outside the home, and to those who do not shy-away from French-fried foods.

Taking a longer look at these points, one at a time:

### *Quality-Slipping Sensed*

Fish sticks were introduced less than a year ago by fish packers with the highest quality standards and the technological capacity and know-how for keeping them high. The initial consumer reaction was good. The quick competitive reaction is already apparent. Goods have come on the market which cannot help but hurt it, goods crusty with heavy breading and gray with grease; goods where cooking and breading and grease are counted on to conceal flavors which should never have been there.

Nor is all of the low quality the result of excess breading and fish which was inferior to begin with. Good fish sticks require good technology, particularly in cooking times and temperatures.

### *Youth Trade Potential Offsets High Calories*

In a calorie-conscious country fried foods find themselves under distinct limitations. At the same time, their convenience off-sets this handicap to a considerable degree in the apartment house belts and particularly among women holding jobs.

Market surveys among fish sticks users tend to indicate that the children constitute a highly important segment of the market, and one with a high potential for further growth. A woman may count calories for herself, but not for her kids; and there is evidence that many children like their fish in sticks.

### *What of Fish Sticks For Pacific Industry?*

Where do fish sticks fit into the Pacific production picture?

For the Pacific producer the practicability of fish sticking appears to be primarily a matter of cost of fish. In this he is under much the same fish-cost handicap as in the case of fillets—only more so, in that it is to be expected that a larger portion of the market for fish sticks will lie in the East—at least for now.

At present, it would appear that Pacific sticking would require a realistic price policy on the part of the fishermen; while the packer would be up against the necessity for large development and promotional expenditure.

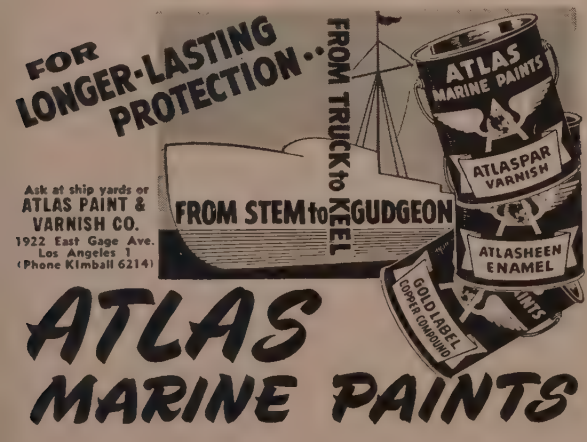
He would need not only a supply of fish at a relatively low price, but assurance that the price would not be jacked-up to non-competitive levels as soon as the business got going.

It has happened before.

## Cook Inlet Tagging Projected This Season

Spawning escapements to Cook Inlet streams, notably the Kenai and Kasilof Rivers, is a perennial subject for controversy, something upon which few men can agree. This year the Fish and Wildlife Service will inaugurate a tagging program which may afford an index of the adequacy of escapement, as well as a means for determining migration routes and behavior of the races bound for the more important tributaries.

The Service is planning to charter a small seiner with a crew of four to fish in Cook Inlet for tagging purposes in the period from July 5 to 17.

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ICE MAKER

The new Vilter Polarchip unit brings you a popular kind of ice—to be made in your plant, as you need it—at costs far below purchased ice. Supplementing the famous Vilter PakIce, Polarchips are cold, crisp flakes, or chips of ice. Easy to handle, they pack around the product, yet will not arch as the ice melts. You can buy the compact 3-to-5 ton Polarchip machine with a compressor, or you can use existing refrigeration equipment during off-peak periods. Polarchip ice can be stored in any type of suitable bin until it is needed. Views above and at the right show the neat housing, the new Polarchip machine, and Polarchip ice.

**Polarchip will help these industries—and more**

**FISHING**

Polarchips expose maximum chilling area to the fish, chill quickly, won't bruise or puncture the fish. These crisp flakes shake down and blanket the fish.

**DAIRY**

Polarchips' "shingle shape" fills in around cartons or bottles readily, reduces air infiltration. They won't arch up over the containers.

**POULTRY**

Polarchips filter around birds, surrounding them completely. Preserve appearance, and won't damage skin. Poultry is kept clean and fresh.

**MEAT**

Polarchips are ideal for icing hearts, livers, and other parts. Clean as the water they are made from, Polarchips are perfect in meat grinders.

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Air Units • Ammonia & Freon Compressors • Booster Compressors • Baudelot Coolers • Water and Brine Coolers • Blast Freezers • Evaporative & Shell & Tube Condensers • Pipe Coils • Valves & Fittings • PakIce and Polarchip Ice Machines

## Canada's Biological Station Chiefs Switch

Directors of two of Canada's important fisheries biological stations will change offices early this summer when Dr. J. L. Hart, of the Pacific station at Nanaimo, goes to the Atlantic station at St. Andrews, N.B., to replace Dr. A. W. H. Needler.

Dr. Hart has been director at Nanaimo for the past three years, succeeding Dr. R. E. Foerster in that post.

Announcing the switch, Fisheries Minister James Sinclair says that it will serve a double purpose. Dr. Needler will expedite ground fish research on the West coast, while Dr. Hart will be helpful on the East coast, where the dwindling run of Atlantic salmon has become a cause of major concern.

## Razor Clam Quota Dug in Jig Time

The 500,000 lbs. of razor clams in the Washington state commercial quota lasted only a week when the season opened in March. Good crop of clams in the sand, favorable tides and weather, a horde of expert diggers and a fair market all combined to clean-up the quota quickly.

While some experts were able to dig 200 lbs. of clams at a tide, the average was reckoned at 66 lbs.

Price was 11c per lb. at the beach.

## Barbey Succeeds Sloan

Graham Barbey, president and manager of the Barbey Packing Corporation, Astoria salmon and tuna canning firm, late in March was appointed a member of the Astoria School Board, succeeding Gordon Sloan, member of the Inter-American Tropical Tuna Commission, whose resignation had been necessitated by illness.

## Halibut Co-Op Elects

Halibut Producers Cooperative at its annual meeting late this spring elected Carl Sather, Jorvard T. Smith, Sam Hansen and Clarence Nordahl as trustees to fill the vacancies on the board left by the retirement of Andrew Johnson, Nick Mathisen, Olaf Schei and Hans Warne.

Pete M. Otness was elected president of the cooperative, Capt. Smith was chosen first vice president and Capt. Sather second vice president. Nels J. Stenvaag was chosen secretary and Roy C. Clifford treasurer.

Hold-over members of the board of trustees include: Walter Hofstad, Marin Andreasen, Robert Pollack, Henry Qualheim and Erling Jacobsen.

W. B. Johnson is manager of the cooperative.

A cross section of San Diego's tuna-fishing industry is represented in this group recently taken by PACIFIC FISHERMAN, at the famed Fish Mongers Club. Left to right: Rocco Parmigiani, clipper managing owner; F. L. "Pete" Szalinski, MARINER; Hector F. Salazar, La Industrial de Ensenada, S.de R.L. and custom broker; Eddie Varley, SUN VICTORIA; William Olsen, Olsen-Johns Co.; William Magellan, ANNA M; Joe M. Medina, QUEEN MARY; Victor Goularte, ENDEAVOR; Honorary Fish Mongers, Les T. Gates, New York and George Ahrens, Wilmington, Radiomarine Corporation; Harold Morgan, CHICKEN OF THE SEA; club president, Matthew Monise; Port Director John Bate; Frank Buono, San Diego Fisherman's Association; Machado Medina, ALPHECCA; Fernando Medina, skipper; Manual Monise, RUTHIE B; Horace Miller; Matias Arjona, Naviera Y Comercial, S. de R.L. Ensenada custom broker. Kneeling: Fred Klicka; Cosimo Cutri, managing owner.

## Oyster Yield Rises With Ides of March

While flavor and condition of oysters from the fresh market viewpoint was excellent in the Pacific Northwest all winter, economic recovery per bushel of oysters used for canning was extremely disappointing to processors until about the middle of March.

After the hard time of income tax filing was over, the upturn in oyster recovery noted about March 15 was most welcome to the canners. With about two months of packing left, and the prospects of good yield during that time, they were running their plants so actively that adequacy of oyster supply began to cause concern.

## George Dew Heads Tuna-Producing Operation

George Dew, former sales manager of the San Diego division of National Steel & Shipbuilding Corp., has been named president of the National Marine Terminals. This organization controls the operations of a fleet of 12 tuna clippers and a fish freezing plant at Paita, Peru. Fish from the clippers is delivered to Westgate-California canneries.

## Mackerel Landings Rise

Mackerel landings at Los Angeles harbor picked up somewhat in March, 743 tons being unloaded, from which 14,255 cases were packed.

Anchovy fishing was poor, only 546 tons being brailed and around 2,000 cases packed.

# Brined Tuna Duty Brought Under Fact-and-Logic Fire

The Southern California tuna industry is seeking a "new look" from the government as to why canned tuna in brine carries an ad valorem tariff of only 12½%, while the same product in oil has an import duty of 45%.

Last month the Tuna Research Foundation, Ed L. Morris, director, represented the industry in the new move for protection again the heavy increases in low-duty imports of in-brine tuna. The industry now seeks to have the tariff raised to 25%, ad valorem.

The Foundation has explained to the U.S. Customs commissioner that the 12½% duty springs from the Icelandic trade agreement of 1943, which country has never engaged in the tuna trade, but the opportunity was found later to tag the 12½% duty because of an all-inclusive insertion, "and other canned fish in brine."

Actually, Mr. Morris pointed out, there never was any basis for interpreting canned tuna as being within the above, because it was clearly specified the agreement was dealing only with "articles of growth, produce or manufacture of Iceland." Tuna is not now and never has been produced in that country.

It was also emphasized that if it had been the intention to grant a concession on imports of in-brine tuna, the logical place to insert it would have been in a trade agreement with Mexico, negotiations for which were in progress simultaneously with Iceland conversations; moreover, tuna in-brine was not even being produced during the Iceland negotiation and therefore could not, the industry contends, at that time have been an article of commerce.

## Secretary McKay Will Tour Alaska This Year

Secretary of the Interior Douglas McKay expects to spend about 10 days late in July in Alaska, where his department has wide responsibilities. He will be accompanied by William C. Strand, director of the Office of the Territories, and a former Alaska newspaperman.

## Crabbing Peaks Early

Crab fishing out of Grays Harbor and Willapa Harbor showed sharp improvement this spring over the several immediately previous seasons; but the good yield didn't last as long as the fishermen hoped.

Crab landings sloped off sharply about March 15, and fishermen were inclined to feel that the catch would be light for the balance of the year. Certainly, however, the picture was much brighter than it had been for several seasons.

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## WORLD'S BEST BUYS IN MARINE ENGINES

**for fishing boats, work boats —for any commercial use!**

Horsepower for horsepower, you can't buy a better marine engine for smooth, dependable operation and *more* years of hard service at low upkeep cost than a compact, power-packed Chris-Craft! Read what this user says:

Robert A. Wheeler

"I am more than pleased with the Chris-Craft Marine Engine in my new 30-ft. lobster boat, *Barinda*," writes Robert A. Wheeler, commercial lobsterman of Green Harbor, Mass. "Gasoline economy really surprised me. I used less than a gallon an hour going from mooring to mooring and hauling 185 traps. I know that other fishermen here did not match the economy of my Chris-Craft. Only maintenance required was to clean spark plugs once during the season."

Chris-Craft Marine Engines are available in 60, 95, 105, 120, 130, 131, 145, 158 and 160 h.p. with reduction drives, opposite rotation and Chris-O-Matic for most models. See your Chris-Craft Dealer or mail coupon for catalog today! Buy NOW!

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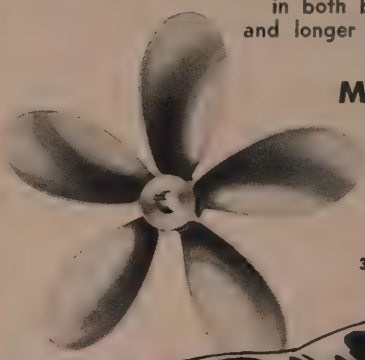

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# Fishermen's Packing Corporation

**ANACORTES, WASH.**

*Canners of*

PUGET SOUND SALMON

*Our BRANDS*

**SOCKEYE**
"Snow Cap"—"Snowland"

**COHOE**
"Olympic"—"Ocean Spray"
"Green Breaker"

**PINK**
"Waterfall"—"Ocean Blue"

**CHUM**
"Golden West"—"Golden Glow"

***Cannery:*** **ANACORTES, WASH.**

## Squid and Anchovies Canned at Monterey

Squid and anchovies were being processed in Monterey Bay area canneries in small amounts last month.

One of the most active canneries was the Santa Cruz Canning Co., Moss Landing, Joe Olivieri, manager.

Santa Cruz cannery was packing squid delivered by Nardo Olivieri, **Three Sisters;** Joe Cardinalli's **Sal-Boy;** and John Bassano's **Lou Denny Wayne.**

In Monterey the Hovden Food Products Co., and California Packing Co. had processed some 500 tons of anchovies. The catch was made near Santa Barbara and shipped north.

Peninsula Packing Co. was processing imported tuna.

## Ralph Fleming Dies

Ralph S. Fleming, who had been a factor in the fish and shellfish business at Seattle for a number of years through Dungeness Crab, Inc., and Dungeness Sales, Inc., both of which he headed, died in Seattle in February at the age of 52. He had been ill for some time.

A native of Scotland, he entered the shellfish canning business on the Washington coast during the Second War. While crab was the product in which he participated most actively, he packed salmon and other products to some extent.

**G. H. Clark, well-respected figure in the Southern California fisheries, who has joined the research and production staff of Star-Kist Foods, Inc.**

## Shad Roe Pack Due

Bell Smoked Fish Co., San Francisco, is getting ready to pack shad roe.

Although the run hadn't really started by the first of last month, fishermen and cannery officials were optimistic that the catch would be satisfactory. Fishermen were getting 8½c for roe, and 2c per lb. for buck shad.

## "Hoke" Clark Joins Star-Kist Foods

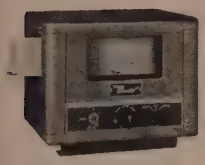
G. H. Clark has joined the research and production staff of Star-Kist Foods Inc., according to an announcement made to PACIFIC FISHERMAN by Nick Trutanic, manager of production for the tuna packing company.

Mr. Clark has a well-known background in the tuna industry. For the past several years he was engaged by the industry in a study of tuna packing standards. Recently he joined the staff of the West Coast Packing Co., and for some years was associated in the Terminal Island Sea Foods Ltd. with Herbert C. Davis.

Mr. Trutanic also announced that Borti Petrich, formerly of the **Stranger** which for years fished for French Sardine Co., has been appointed assistant fleet manager. At the same time Leland Links, formerly associated with the Wilbur-Ellis enterprises, has joined the Star-Kist production staff.

## Radio for Patrol

Washington Department of Fisheries patrol cars and boats are all served by radiophone equipment now as result of an arrangement made with the Highway Department for handling fisheries communications through its extensive radiophone system.

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**ALBACORE**
Beneath Your Keel!

**B-D-R**
Shows You The Fish Is There.

The Ocean bottom before your eyes. Bendix does it!

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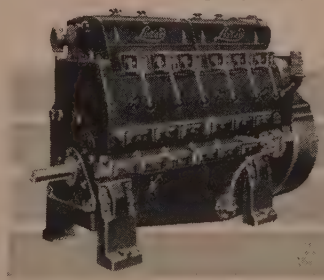
*You get reliable, low-cost power with* **Lister** **DIESELS**

★1 to 6 cylinders ★9 to 54 horsepower

Specially designed for running at high speeds, Lister Diesels are:



★ Easy starting
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These and many other features give you steady, economical power for your marine propulsion and auxiliary needs. For full information, write . . .

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*Distributors of Lister Diesels in the U.S.A.*

## Peruvian Fish Industry Forming Institute

A National Fishery Institute is being organized in Ecuador for the purpose of research and to formulate regulations seeking protection and also stimulation of the Ecuadorean fishing industry.

Membership is apparently composed of representatives of the Sociedad Nacional de Galapagos of the American - owned Industria Ecuatoriana Productora de Alimentos, and a fishermen's union. Activities will be financed by members' dues.

## 10 Sardine Plants Left On San Francisco Bay

The last sardine reduction plant on McNear's Point, near San Rafael, Calif., the Hoffman Packing Co., was being dismantled last month and the equipment sold. It is owned by R. J. Roesling & Co., San Francisco.

According to a swift check around the San Francisco Bay area, the only sardine reduction plants ready to operate are: Tamalpais Fishing & Packing Co., Red Rock Fisheries, Carquinez Fisheries, Pt. Edith Fisheries and Edible Fish Meals & Oils, on Pt. San Pablo. At Pier 92, San Francisco — J-D Packing Co., Keystone Fisheries; Northern Packing Co., Winged Victory Fish Products Co. and F. E. Booth Co., Inc.

## Shrimp Trawl Operation In Underwater Movie

Pedro L. Pinson, president, Shrimp Association of the Americas, and head of the shrimp-freezing company of Refrigeradora del Noroeste, S. A. Mazatlan, said last month an underwater film was being successfully made of a shrimp trawl under operating conditions. Some difficulty was being encountered because, when disturbed, shrimp schools stir mud along the bottom causing cloudy water.

## Linen Thread Features Four Pacific Veterans

The current issue of "Gold Medal Netting News," house organ published by The Linen Thread Co., features four members of its Pacific staff on a page headed "Pacific Coast Old-Timers," which presents large photographs of:

John E. Richardson, Pacific Coast manager, 34 years with the company;

L. F. Crowe, assistant manager in the San Francisco office, 29 years of service;

Mrs. E. O'Neill, in charge of accounts receivable bookkeeping at San Francisco, who joined the company 27 years ago;

Kenneth McLaughlin, the company's representative at Los Angeles, with 22 years of service.

THE ONLY WAY TO COMPETE WITH
Archer "S"
IS BY USING
Archer "S"
America's Finest
SOYBEAN SALAD OIL
PREMIUM FLAVOR AT NO EXTRA COST!
Refined deodorized and winterized by continuous vacuum process
A superb oil for canning tuna and sardines!
ARCHER-DANIELS-MIDLAND COMPANY
MINNEAPOLIS 2, MINNESOTA


## "Alaska Limit" Seiner For Canadian Fisherman

Matsumoto Shipyard, Deep Cove, near Vancouver, B. C., is building a salmon and herring seiner of a new type and size representing a modification of the more conventional 70-80 foot boat for this type of fishing operation. The Matsumoto boat, being built for George Brajcich, is 58' long with beam of 17'. Its engine is a GM 6-cyl. Series 110 diesel representing 205-hp. with 3.75:1 reduction gear.

This vessel, comparatively new to British Columbia waters, is patterned after some of the smaller Alaska boats.

## 1 and 4-Pound Packs by Westgate

Westgate - California Tuna Packing Company, San Diego have announced two new tuna packs, to be marketed under both the "Breast O' Chicken" and "California" labels. Equipment has been installed in the plant to produce both 4-lb. and 1-lb. cans.

The 4-lb. can, for the institutional trade, is handled by a new machine installed in late February; the 1-lb. pack is hand-packed at present. Both are "chunk" packs.

## Southern Calif. Radio Rules Will Change

Through the new Southern California Radio Council, with meeting headquarters at Wilmington, Calif., comes the news that on and after August 1, all radiotelephone users must change over from 2174 to 2009 kilocycles to talk to KOU and, at the same time, every user must call inter-ship on 2182, the international calling and distress frequency. After contact is made on 2182, then the conversation is switched, either to 2638 or 2738.

## Teamsters Favor 192

Washington state locals of the Teamsters Union this spring endorsed Initiative 192, which would close inner Puget Sound waters to commercial salmon fishing during additional periods of the year; and would impose special restrictions upon reefnets and waters presently fished largely by gillnets.

The action was taken at the urging of an officer of the automobile salesmen's union.

## Geo. Bambrick Dies

George A. Bambrick, former fishermen's union official and one-time fish buyer, died at Astoria recently at the age of 68. He had been an invalid for a number of years.

He was formerly business agent of the Columbia River Fishermen's Protective Union; and at one time was a fish buyer for the New England Fish Co.

## Four-Trawler U. S. Fleet Fished Bering for Crabs

There are four U. S. trawlers working the Bering Sea this spring, Capt. J. E. Shields' **Nordic Maid**, commanded by Capt. Ed Shields, having joined Wakefield's Deeo Sea Trawlers, Inc., fleet, consisting of the **Deep Sea, Shelikof** and **Foremost.**

The latter two vessels, converted purse seiners of the larger type, may do most of their fishing on the Pacific side of the peninsula, where the crabs generally are larger, and where in the past there has been no competition from the Japanese.

This spring Takashi Miyahara, U. S. fish and Wildlife Service biologist, who last season was a scientific observer aboard one of the Japanese crab vessels, is conducting biological studies aboard the **Deep Sea.** While it is expected that crab investigations will be conducted under the authority of the North Pacific Fisheries Commission in the future, there is no possibility of getting these under way this season and the Federal Service felt it imperative that the data should be continuous and that the present season should not stand as a gap in the information on the King crab.

## University of B. C. Establishes Fishery Institute

Recognizing the growing importance of fisheries in the North Pacific, the University of British Columbia has established an Institute of Fisheries with Dr. W. A. Clemens, formerly chief of the Pacific Biological Station, Departure Bay, in charge.

Dr. Clemens recently returned from Manila, where he attended the Pacific Science Congress. He visited several countries in Asia and became impressed with the technical preparations being made there for more intensive fishing. He expressed the opinion that Japan, through necessity, has made remarkable advances in this connection and that Canada and the United States will have to be alert to the threat of growing competition from across the Pacific.

The University of British Columbia will provide courses in fisheries research next year for graduate students through the new Institute of Fisheries, but these research men will not necessarily go directly to the industry. What Dr. Clemens would like to see is a series of courses aimed at the men who actually participate in the commercial fisheries. These would be held during the winter months when, apart from the herring operations, the industry is comparatively idle.

A meeting was held at the university early in March, attended by federal and provincial fisheries and educational authorities, to plan postgraduate courses at the Institute of Fisheries that will be available for students seeking degrees. The idea is to stimulate interest in fisheries and provide technical personnel for the industry and the government laboratories and stations serving the fisheries of the Pacific coast.

## Fish-Protective Teeth Put in B. C. Dam Law

Builders of dams in British Columbia must in future provide fishways for free passage of fish **up and down** stream under an amendment to the provincial fisheries legislation.

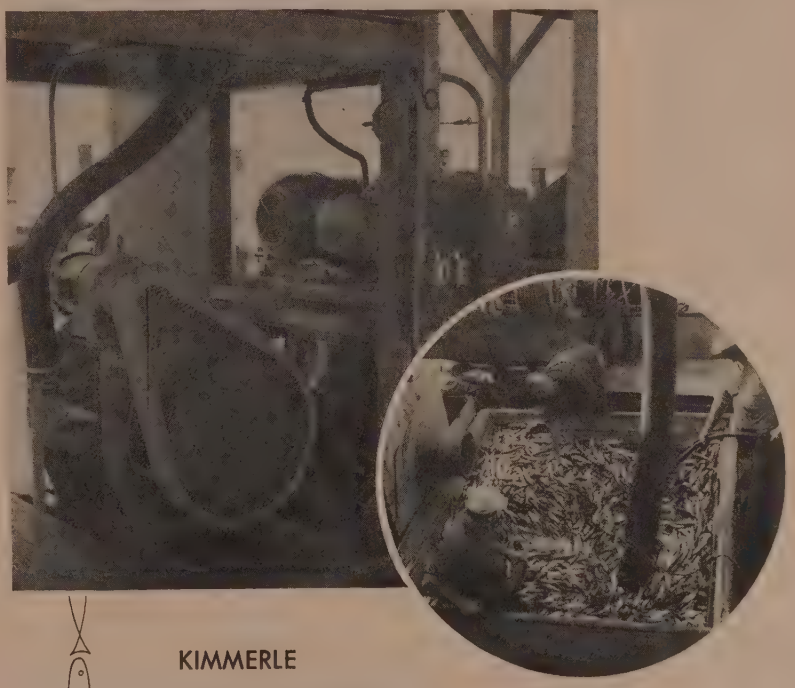
The department of fisheries at Victoria has been seeking for some time to obtain this form of protection for the salmon fishery. While some builders of dams have been highly co-operative in the past, others have been reluctant sometimes to make the necessary investment for fishways. The new law will make such provision compulsory, with penalties ranging from $100 to $10,000 a day for violations.

In addition to fishways, dam builders are required to install screens to prevent young fish from being swept into penstocks, pumps, turbines and other destructive apparatus.

## J-D Cans Squid

J-D Packing Co., Pier 92, San Francisco, was busy packing squid last month.

The squid was being trucked to the Bay City from Monterey. Fishermen there were getting $35 per ton.

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# Multi-Million-Dollar Economy Forecast by Sockeye, Upsurge

Almost phenomenal returns of the last three years demonstrate that the Fraser River Sockeye has been resurrected, and re-establishment of the original multimillion-dollar economy based on that fishery is within sight.

This was the reassuring prospect offered to members of the British Columbia Natural Resources Conference in Victoria, B. C., by Loyd Royal, director of the International Pacific Salmon Fisheries Commission, recently.

Mr. Royal confessed that there were still elements of mystery in the investigation of the Fraser Sockeye, but it was clear that real headway was being made. One puzzling factor was the full influence of dams and other obstructions. Dams, he said, and changing of the environment in the migration and reproduction areas by obstruction, impoundment and diversion of water are not always responsible for economic losses suffered by the salmon fishery. The fishery itself may affect the productivity of the runs.

Mr. Royal said that the results to date from the program of the international commission were gratifying both from a scientific and economic standpoint. The catch and escapement of the last three years had been "almost phenomenal," due entirely to an increased rate of productivity of an increasing escapement. The 1953 run was the largest of this cycle since 1917; the 1952 run was the largest cycle run since 1912 and the catch in 1951 was the greatest in the cycle since 1903. Value of the catch of the last three years exceeded that of the preceding three cycle years by almost $18,000,000.

"This is a considerable sum," admitted Mr. Royal, "but it is only a start toward the foreseeable goal of re-establishing the original economy of the Fraser River Sockeye fishery. The once great Quesnel run is firmly re-establishing itself. The Stuart system of the far north produced over 2,500,000 Sockeye in 1953, yet the total escapement in 1941, only three cycles previous, was less than 12,000 fish. The re-birth of the Fraser Sockeye in dollars and cents has truly commenced."

## Sardine Plant Being Designed for Venezuela

Ray B. Bentley, Universal Canning Machine Co., Pacific Grove, Calif., is designing a sardine processing plant for Associon de Pescadore de Margarita, Caracas, Venezuela.

The plant will be at Kumana on the Caribbean some 300 miles from Caracas. Among the equipment being supplied by Universal Canning Machine Co. are two stainless steel packing tables, two 50' pre-cookers, with Cyclone Fence woven wire belt, three can drainers, and a saucing unit, and various conveying units.

American Can Co. closing machines will be used.

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## "Porter" Lampara Net To Be Tried on Tuna

A new type of modified lampara net, which has been used successfully for anchovies, is expected to make a try for tuna during the coming months in Southern California.

The net has been tentatively named the "Porter" net, and was developed on the purse seiner **Victoria,** in cooperation with the Porter Bros., who operate the boat with Johnny Zankich, skipper.

Briefly, the net is distinctive from others of its category in that the cork and lead line are pulled-in at the same time.

This net has worked out of Port Hueneme, where Porter Bros. are located, in connection with a plane for spotting schools.

## Six-Killer Fleet Seeking B. C. Whales

Whaling was to be resumed in the North Pacific in mid-Spring by the six-ship fleet of British Columbia Packers, Ltd., operating out of Coal Harbor, the shore station and factory near the northwest tip of Vancouver Island.

The company plans a six months' operation, the maximum provided by the International Whaling Agreement, with the season commencing two weeks earlier than last year. The 114-foot motor vessel Lavellee, powered by 375 h. p. Vivian diesel, has been acquired by the company to serve as a killer ship, and has been undergoing conversion from her former role as a fish packer for National Fisheries, Ltd., Vancouver. Originally, Lavallee, which was built in 1944 at A. C. Benson shipyard in Vancouver, was a trawler-type magnetic minesweeper. Of wooden construction, she had a minimum of metal in the hull and housing.

**Key figures at the keel-laying of a 127' steel tunaclipper to be built by National Steel and Shipbuilding Corporation, San Diego, for Joe Soares. From the left: George A. Dew, president, National Marine Terminal, Inc.; Harold Cary, general manager, American Tunaboat Association; C. Arnholt Smith, president, National Steel; Capt. Soares; James B. Lane, president, Westgate California Tuna Packing Co., for which the clipper will fish.**

**Lavellee** will take her place with the company's other killer boats—**Polar 5, Globe VII** and **Bouvet 3,** which were built for the purpose overseas, and **Nahmint** and **Tahsis,** former packers, which were whaling last year but during the winter months served as herring boats.


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## Alaska Fisheries Dept. Out for Big Increase

A nice boost of nearly $300,000 is to be asked of the 1955 Alaska legislature by the territorial Department of Fisheries, according to announcement by C. L. Anderson, director.

The present biennium appropriation is $510,000, but proposal for the next two years seeks $800,000.

The 1954 spring meeting of the board was attended by Robert Kallenberg of Dillingham, Henry Denny of Saxman and Ken Bell of Fairbanks. Neither Ira Rockwell of Cordova nor Howard Wakefield of Kodiak attended.

## New Model P & H Diesels Long on Power, Light in Weight

Harnischfeger Corporation is now volume producing a complete line of improved two-cycle P. & H. marine diesels, in horsepower ranges from 58 to 255, in two-, three-, four- and six-cylinder sizes. The new models with their very low weight-to-horsepower ratio are particularly well suited for powering fishing boats. Small size-for-power output is another important feature of these new diesels for marine service.

Stressing the improved performance of these P&H models, P&H states there is a 36% greater power output. While of the same basic design as the former models, the new higher-performance engines carry 52 major advancements and refinements —resulting from a program of intensive engineering and testing. Even greater simplicity of design and construction is claimed for the new engines. Operating speed has been increased to 1800 r.p.m. Compression ratio of all models is 16 to 1 and bore and stroke are 4.5" x 5.5".

## National Steel Secures Atlas-Superior Agency

As of April 1, the National Steel & Shipbuilding Corporation, San Diego, became the authorized engine parts and service distributor for Atlas and Superior engines in San Diego county. The announcement was made by J. A. Flynn, branch manager for the National Supply Co., Terminal Island.

Ample stocks of parts will be maintained, says Mr. Flynn. William Haull, service engineer, and Harold Emanuel in the parts department are ready to serve.

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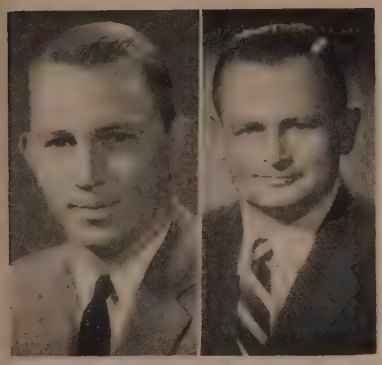


A. Black R. K. Carson

## Canco Advances Two Pacific Sales Managers

American Can Company has announced promotion of Alexander Black to manager of commodities in the Pacific Division and appointment of Robert K. Carson to succeed him as Southern California district sales manager.

Black, who has held the Southern California sales managership for seven years, will make his headquarters in the company's Pacific Division offices in San Francisco. In his new position, he will supervise and promote container sales in commodity classifications within the Division.

Carson will make his headquarters at the company's Los Angeles sales office, 4871 Santa Fe Ave.

## Atlas Imperial Diesel Data

The National Supply Company's Model 35 Atlas Imperial marine diesel engines are presented in a new 8-page illustrated Bulletin No. 419. Design and operating features, construction specifications, performance curves, and dimensions are given for a 4-cylinder engine, 110 hp. at 1000 rpm. and for two 6-cylinder engines rated at 195 hp. and 300 hp. (supercharged) at 1225 rpm.

## Industrial and Marine Engines Headquarters Moved

Industrial and Marine Engines, formerly Engine Sales & Service of Terminal Island, have taken over the headquarters of Newmark Specialty Co. which last month indicated it was closing business.

Industrial and Marine Engines are dealers for Chrysler marine engines and P & H diesels. The new address is 804 E. Anaheim Blvd., Wilmington. In April the service facilities of the firm were moved to Colonial Yacht Anchorage, Cerritos Channel, in Wilmington.

In taking over the headquarters of the Newmark firm, Industrial and Marine has also assumed some of the lines handled by the Newmark enterprise. The firm is now prepared to service boat owners, commercial and pleasure, with Marmac controls, Albina winches and power takeoffs, Champion spark plugs, the Sudbury line, Wisconsin auxiliaries, marine pumps, Walters keel coolers and many other marine lines.

A new marine diesel line just added is Hercules.

## DeLaval Announces Shift

The De Laval Separator Company recently announced that Earl C. Edgar has resigned as advertising manager. To succeed him, the company has appointed John H. Bronson as acting advertising manager. Mr. Edgar is joining the Conklin Mann and Son Advertising Agency of New York City.

Donahue & Coe, the company's advertising agency for many years, will continue to handle the account.

## Booklet on Anchoring Provides Valuable Data

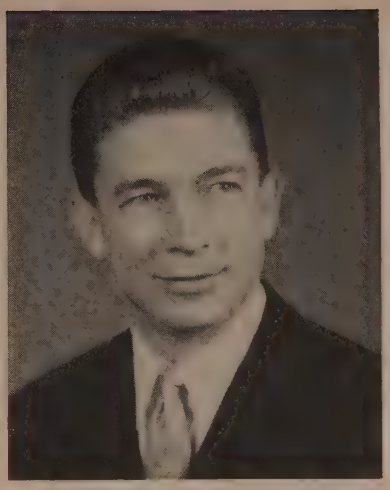
An unusually instructive and helpful booklet, "Anchors and Anchoring," is offered on request by Danforth Anchors, 2121 Allston Way, Berkeley 4, Calif. The booklet is really an instruction manual, full of specific technical data, with advertising kept to a minimum. It provides valuable information in abundance on the subject of anchors, how to use them, and their holding power under varying conditions of rig, bottom and weather.

## New "Power Parade" Booklet

The important part diesel power plays in the world's economy today is told in the Spring issue of "Power Parade," a booklet issued quarterly by the Detroit Diesel Engine Division of General Motors.

A copy can be obtained without charge from the Divisions' Distributors or by writing Detroit Diesel Engine Division, 13400 W. Outer Drive, Detroit 28, Michigan.

**Tony Bozanich, fleet manager for Pan Pacific Fisheries and managing owner of several tuna boats, inspects the demonstrator station wagon outfitted by Radiomarine Corp., Wilmington, Calif., office, to exhibit the Fischlupe fish finder.**



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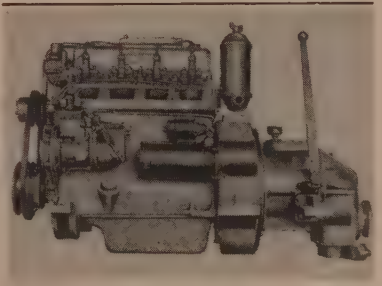

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## New Red Wing Diesel

Production of a new 4-cylinder diesel engine for boats to 35 feet in length has been announced by the Red Wing Motor and Manufacturing Company.

Designed for both pleasure and commercial craft, the medium duty engine develops 35 to 45 h.p. at 2,000 to 2,400 r.p.m. With a 3½" bore and 3¾" stroke, the power plant displaces 144 cu. in. and is available in direct drive type or with reduction gearing in ratios up to 3:1. The unit delivers moderate power, say the manufacturers, with extreme reliability, safety and utmost economy of operation in fishing boats, utility craft, cruisers and auxiliaries.

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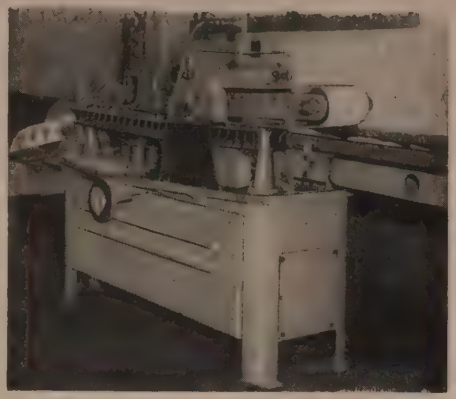

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## R. S. Duzich Re-elected By Insurance Exchange

Robert S. Duzich has been re-elected board chairman of the Commercial Fishermen's Inter-Insurance Exchange, whose home offices are in San Pedro. He has held this position since 1946.

Other officers elected for 1954 are Nicholas G. Felando, vice chairman; Stanley Brummel, secretary-manager, and board members Andrew Vilicich, Slavko Ivancic, Vincent Yelusich, Carmen DiMassa, Vincent Marinkovich, Andrew Tipich, and Matt Martin.

## "Star of the Sea" Sold

San Diego tuna clipper, **Star of the Sea**, owned by M. O. and Frank Medina and Eugene Cabral, was purchased last month by National Marine Terminal, Inc., San Diego, a subsidiary of National Steel & Shipbuilding Corporation. She will join the Westgate-California fleet.

## Sperry Names Van Loan For Canada Marine Sales

Sperry Gyroscope Company of Canada, Ltd. announces the appointment of W. D. Van Loan to the position of manager of Marine Sales, responsible for the sale of all Sperry marine products in Canada.

Prior to this assignment, Van Loan has had exceptionally wide experience in both sales and servicing of Sperry marine equipment.

**Branch managers who attended the annual managers' meeting of the machinery division of Northern Commercial Company held at Seattle in March are shown here. Seated, clockwise around the table, are: Howard D. Stephens, vice president; Mel Roe, Ketchikan; Cal Bashaw, Anchorage; Truman Sage, general manager; E. G. Whitehead, Juneau; Eldon Erickson, N C Marine, Seattle, and Gragg Gilkey, Fairbanks. The Northern Commercial Company is Alaska and Yukon Territory distributor for Caterpillar tractors, diesel engines, electric sets and earth-moving equipment, as well as serving users of Caterpillar marine engines in western Washington.**

## Remote Control Device For Automatic Pilot Perfected

Simon "Rocky" Yragui, partner in Shoreline Diesel Maintenance, Fishermen's Wharf, San Francisco, has developed an electric device for the remote control of engaging and disengaging a Freeman Automatic Pilot.

Joe Pomilia, skipper of the San Francisco combination boat **J. F. Pomilia**, has equipped his boat with a Bendix automatic pilot, purchased from Shoreline Diesel Maintenance Co., Fishermen's Wharf. Shoreline Diesel also installed a Bendix depth recorder on the troller **Glacier**, skippered by Steve Rolland.

The same equipment house announced that V. D'Acquisto, San Francisco, has repowered his hook-and-line boat with a GM two cyl. engine, purchased from and installed by Shoreline. It replaces an old-style slow speed gas engine.


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READY-MIXED
BREADING
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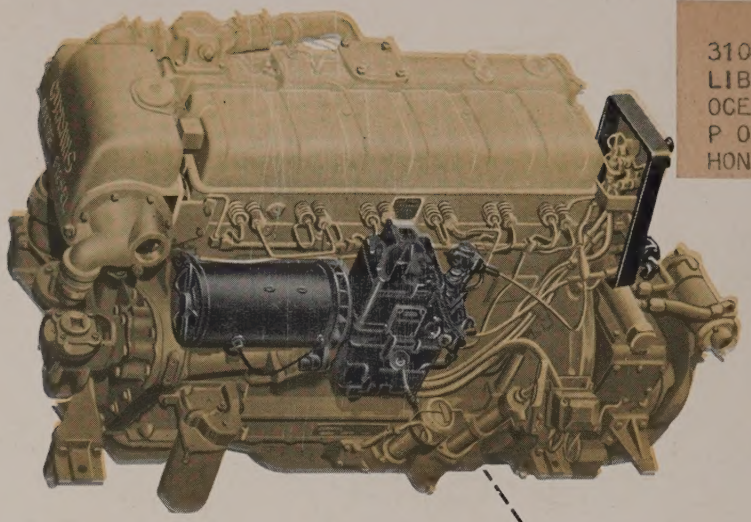
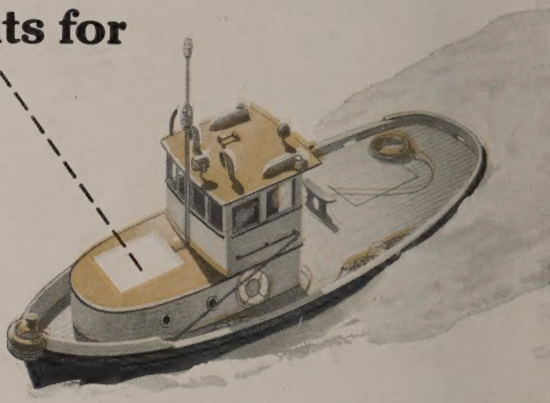


# Cummins newest Marine Diesel means bigger profits for small craft



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